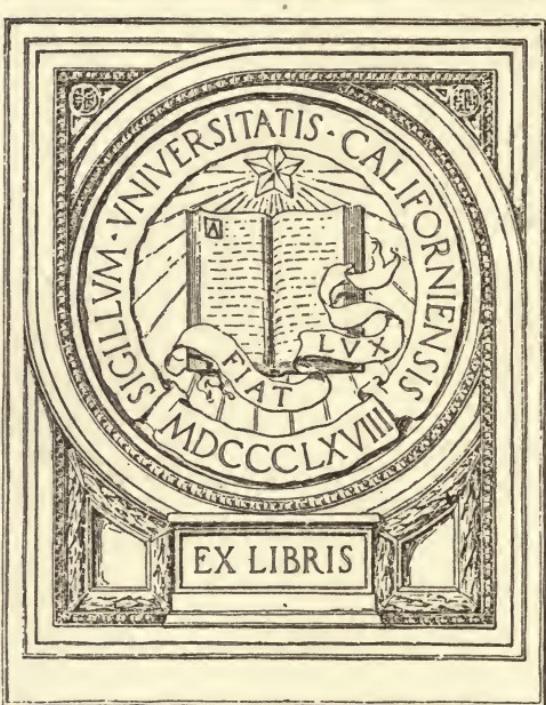


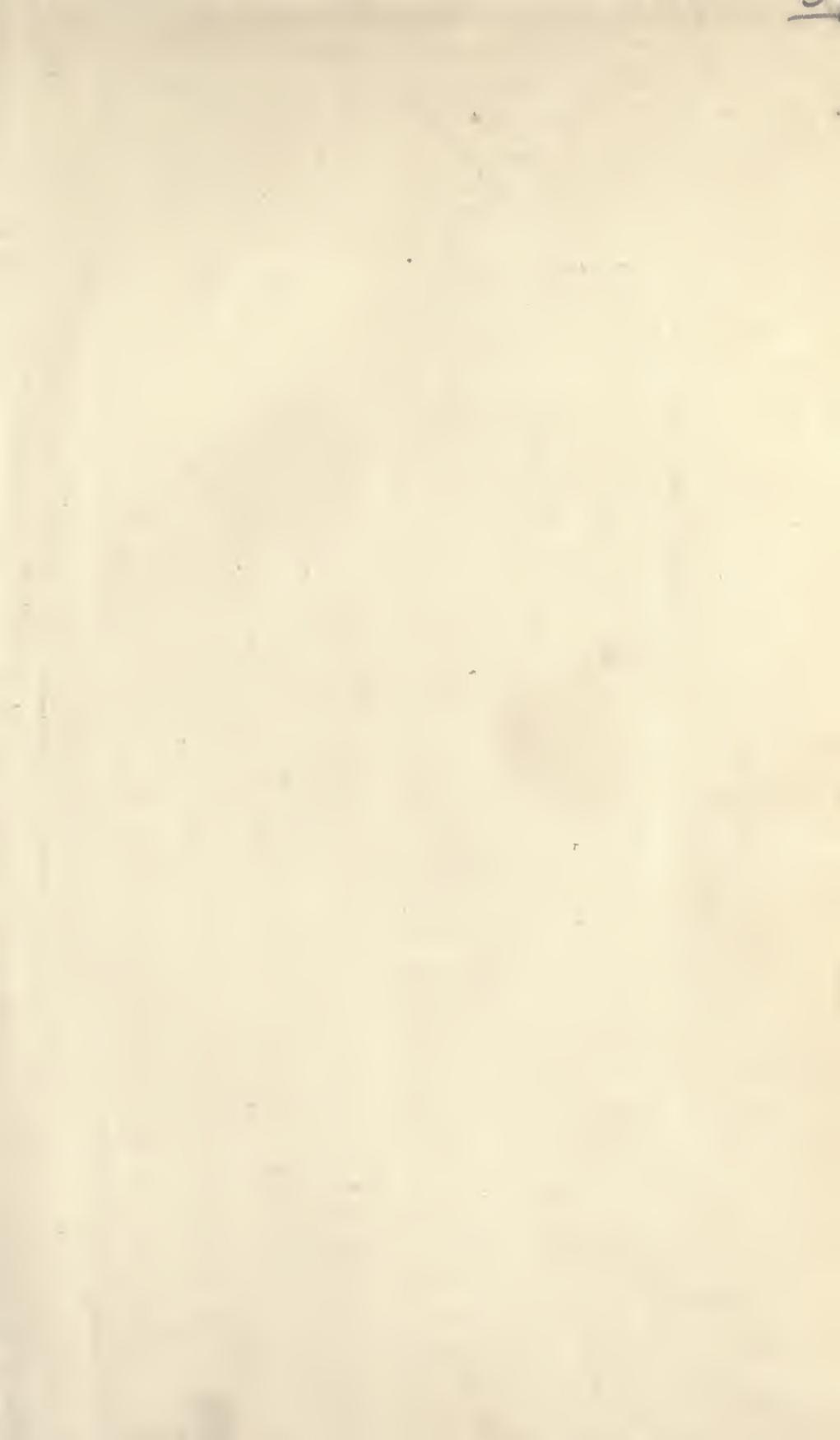
Recreations of A Physician

A. Stuart M. Chisholm



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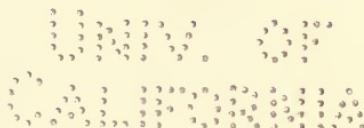


RECREATIONS OF A PHYSICIAN

BY

A. STUART M. CHISHOLM

AUTHOR OF "THE INDEPENDENCE OF CHILE"



G. P. PUTNAM'S SONS
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1914

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THE WORLD
AS I SEE IT

The Knickerbocker Press, New York

To

MY WIFE

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PREFACE

SOME of the following essays were read before different societies, and some of them have appeared in the *Journal of the American Medical Association* and in the *Albany Medical Annals*. Many friends have desired their publication in a more durable form and upon these friends rests some measure of responsibility for the present volume. The essays themselves require little preliminary comment on the part of the author, who cannot hope to shelter himself behind his friends from any criticism that may be directed at the opinions that he has endeavored to express. These opinions will probably be found on examination to be commonplace rather than startling, and more sedative than sensational, but the accusation of tedium also the author must bear alone, unless some legal provision may be discovered which will enable a process-server to cross the Styx, summon certain shades and compel them to accept service; for these are the gentlemen whose opinions the author has adopted and sought to present as his own. Indeed, a cursory review of these pages has shown him how much there is in them of others and how little of himself. He has been reminded of the novel by Castillo-Solórzano entitled *El Desden vuelto Favor*, in which the letter "i" is not to be found from cover to cover.

Here then is this series of essays launched upon the uncertain sea of public favor. Whether a prosperous voyage or a sudden shipwreck shall befall it, does not depend on the further skill of the builder, for beyond the shelter of the port he cannot presume to control

“The waves that buffet or the winds that drive.”

A. S. M. C.

BENNINGTON, VERMONT,
May 10, 1914.

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Recreations of a Physician

I

ON SPECIALIZATION

PROFESSOR THOMPSON, some time ago, in delivering the President's annual address to the "British Association for the Advancement of Science," deplored earnestly what he described as "premature specialization" as tending to "impoverish the individual." To the condemnation of specialization, as thus described, there can be neither rejoinder nor dissent, for the term "premature" prejudgets the cause and implies condemnation in advance. This condemnation is open to the objection of not precisely defining the boundary between what is mature and what is premature, but leaves the decision where it is now, to the irresponsible judgment of eager personal ambition. But in regard to specialization without this qualifying adjective there exists no such prepossession. Specialization is due, indeed, to the development of human activities and to the multiplication of distinct fields for the exercise of human energies. The subdivision of these activities into separate pursuits is both inevitable and beneficial: inevitable, because it is due to the practical recognition of conditions that conform to the axiom that the whole

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is greater than any one of its parts; and beneficial, because only by the separation of human energies into distinct fields can the interests of the whole be advanced and civilization progress. The records of human progress show conclusively that mainly through this division has advancement been achieved, and this necessity is continually reproduced and these divisions of activity again subdivided to meet the requirements of the growing scope of human knowledge and effort.

We have a tolerably full and accurate knowledge of a time when individual men possessed in their own minds all the treasures of learning that their civilization held; when every man in the community was a critic of poetry if not a poet, and a judge of art if not an artist; when Sophocles and Phidias submitted their finished work to the judgment of the common people. And it was not without trepidation that the people's verdict was awaited, for Herodotus tells us that the Athenians condemned Phrynicus to pay a fine of one thousand drachmas for producing on the stage his play *On the Capture of Miletus*, because it did not conform to the canon which they held to govern tragedy. But each individual could only know all there was to learn because that *all* was so limited. Since that time civilization has developed vast stores of history, science, literature, language, social customs, mechanic arts that were then unknown, and it has become impossible for any individual, however acquisitive, to equal the scope of the Athenians.

To be sure, the world has seen in modern times some few men with a horizon so vast that it has seemed almost universal. Leibnitz was one. His face was turned to all the winds of human learning, his mind is said to have touched every point of the intellectual compass.

Selden was accounted a prodigy of various learning in his time. Rabelais and Burton seem to have known all there was to learn. Camden has been called the British Pliny. Dr. Hodgson says of Coleridge that he "shed his light over the whole surface of human interest." Da Vinci's learning was thought "preternatural." When James Crichton was sixteen years old, he was master of twelve languages. When he was nineteen, he engaged to defend, extemporaneously and unaided, any position in law, medicine, mathematics, philosophy, and theology. When he was twenty-one, he publicly challenged the famous University of Padua, offering to confute their views in philosophy and to expose their errors in mathematics. The arguments lasted four days and Crichton was judged successful in every contention. Two years later he was treacherously murdered.

But these men are the exceptions that prove the rule, for if they were not exceptions they would be no longer conspicuous, and perhaps they have been of less benefit to civilization than many humbler men who have trodden their narrow round of simple duty, restricted to careful observation and accurate record.

Universality of genius, then, becoming impossible, a division of activities became necessary, and the separate branches of human effort became specialties. In the manufacturing and mechanic arts, this specialization has marvelously multiplied their benefits. Complaint has been made that there are now no comprehensive lawyers like Sir Edward Coke. It is because the complex development of society has produced such an expansion of the legal field that no one lawyer is now able to till the whole, and law has become automatically subdivided into many specialties,—among them international, admiralty, and criminal law; patent, probate,

and corporation law, and civil government, each of which has its especial practitioners. The very existence of the profession of medicine proves also the naturalness of such subdivision, for, in a large sense, medicine and law are themselves specialties.

The statement has been often made that medicine is an off-shoot of the church and that the thirteenth century marks the point of time when medicine was erected into a distinct science. The statement is misleading and the date inexact. The antiquity of the healing art is indisputable. It is true that during the period beginning early in the seventh century, and ending with the fall of the Moslem power in Spain, in the middle of the thirteenth century, the intellectual degradation of Europe reached a point where all learning among Christian people was preserved by the priests as the only conservators of letters and science in Christendom, but it is also certain that they merely preserved and in no way improved the quality of their trust, for, during precisely this period, *i. e.*, from the fall of Alexandria in 641 to the taking of Seville in 1248, almost exactly six centuries, polite and scientific learning fled to Bagdad and Cordoba, and the lamp of medical progress was carried onward in the hands of Mohammedans. Among the names that physicians love to honor are those of Rhazes, Avicenna the Prince of Physicians, and Averrhoës, whose works were studied in the famous medical schools of Paris, Montpellier, and Padua until nearly the beginning of the eighteenth century. It was this so-called Arabian school who discovered nitric and sulphuric acids and alcohol, and they were thus the precursors of the modern science of chemistry.

It is interesting to recall the comparatively recent

origin of medical specialties, for, in spite of Herodotus's well-known reference to the custom of the Egyptians, and in spite of the Hippocratic refusal to cut for the stone, which implies that lithotomy was a distinct industry, the subdivision of medicine into specialties seems to have started in the sixteenth century rather than in the thirteenth.

Anatomy may be said to have begun with Vesalius. His great work *De Corporis Humani Fabrica*, published in 1543 with engravings by Giovanni, marks the inception of modern anatomy. Prior to Vesalius, the ecclesiastical doctrine of the resurrection of the body had brought down upon the heads of all who desecrated the human body by dissection after death, the anathema of the Church. To be sure, the Church could not always prevent disobedience, nor always punish it. Vesalius obtained his material for the study of anatomy by robbing the gibbets at night. Venice, in defiance of the decrees of Boniface VIII., passed a law allowing one dead human body to be annually used for dissection. Such, however, was the dread of the thunder of the Church, that this law was, I believe, afterwards annulled and anatomy continued to be taught by dissecting pigs. I cannot learn whether the single curved tenaculum was then in use. Scissors certainly were known and excavations at Pompeii in 1819 brought to light many varieties of forceps that were used in the first century, but the only knife known to the early anatomists was the razor, an ignoble reminder of the origin of the art of surgery. The invention of the scalpel was due to either Fabricius or Cæsalpinus, both teachers of anatomy in Padua in the latter part of the sixteenth century. Fabricius died in 1619.

Vesalius became physician to the Emperor Charles

V. in 1543, the year his *Anatomy* came out, and attended him for thirteen years. In 1556, when Charles abdicated the throne and entered a monastery in Estremadura, Philip II. succeeded to the Spanish throne and brought Vesalius to Madrid, where he came necessarily under the control of the Inquisition, then in the full vigor of its iniquitous activity. The tale of his early dissections was everywhere known and the Holy Office took up his case and condemned him to death. Philip II., not venturing to annul openly the decision of the Church, connived at Vesalius's escape from the kingdom of Spain. The Church seems not to have interested itself actively to promote the progress of medicine in the case of Vesalius.

The close connection between anatomy and surgery appeared two years after the publication of Vesalius's great work, *i. e.*, in 1545, when Ambrose Paré's essay on the treatment of gunshot wounds was published in Paris, and that great career commenced which culminated in 1573, the year after the Massacre of St. Bartholomew, in the publication of his monumental work *Deux Livres de Chirurgie*. Pathology also dates from the same period with the publication, in Florence, of Benivieni's work *On the Secret Causes of Disease*, in which he describes the condition of the organs as ascertained by examinations made *post mortem*.

It is not my purpose to enter in detail into the particular development of medical specialties, though the field is an inviting one; nor do I now wish merely to show that specialism is not of recent and factitious origin, as many seem to have thought, but a necessary result of the development and growth of medicine. What I do wish to consider is the reaction of specialization on the individual as well as its result on the profession.

Let us say at once that the effect upon the individual is, in concentrating his activity, to narrow his scope. Professor Thompson notes that it tends to "impoverish the individual." It is essentially an involution and not an evolution. He loses in breadth. The more intently he devotes all his energies to the development of his specialty, the more restricted becomes his intellectual horizon. If general culture can be attained only by the exercise of multiform and comprehensive sympathies, then he who immures himself in a single cell, must deprive himself of the wide range and varied view that another enjoys, who seeks to enlarge and not to limit the scope of his life, and fares at will through the broad field of human activities. This breadth of sympathy, this universality of interest is the purpose and glory of universities, but a university, at least as regards its faculty, is mainly an aggregation of specialists, and its highest rewards go usually to men who devote themselves to special work. This is also true of the greater university of the world, and must therefore represent the rational culmination of special excellence.

The tendency of specialization is, however, to the complete absorption of the individual in his work. In the study of surgical pathology he forgets to develop the harmony of his being, and neglects his own culture for that of pathogenic bacteria. In the pursuit of the infinitesimal he loses sight of the infinite, and spirit becomes an adjunct of matter. Thus his nature is subdued to what it works in, like the dyer's hand. This, it seems to me, is the tendency of specialization, and this tendency must be more or less apparent to every specialist. Similarly his tendency in applied science is to utilitarianism and in religion to materialism, both

of which are acknowledgments of a failure in moral perception.

But the "impoverishment of the individual" is not the purpose of specialization nor yet its principal result. Schiller, himself a member of the medical profession, points out the injury to the individual that is caused by the exploitation of one faculty and the submersion of the others. "With us," he says, "in order to obtain the representative word of human knowledge, we must spell it out with the help of a series of individuals," but he adds that it would be unjust to conceal the compensations with which Nature has provided for these individual injuries. "I will now readily acknowledge," he says, "that little as this practical condition may suit the interests of the individual, yet the species could in no other way be progressive. Partial exercise of the faculties undoubtedly leads the individual into error, but the species into truth." Each individual, as knowledge expands and specialties increase, contributes less and less toward this representative word, but the word itself, to continue Schiller's figure, becomes progressively finer, more exact, and more complete, while each subdivision becomes also more and more essential to the perfect development of the whole. De Quincey, in his essay *On Superficial Knowledge*, observes, "with regard to Medicine, the case is no evil but a great benefit—as long as the subdividing principle does not descend too low to allow a perpetual re-ascent into the generalizing principle which secures the unity of the science." In the separate provinces of knowledge, he says, "we are of necessity more profound than our ancestors; but, for the same reason, less comprehensive than they. Is it better to be a profound student or a comprehensive one?" and he answers this question by saying, "It is

better for the interests of the individual that the scholar should aim at comprehensiveness, and better for the interests of knowledge that he should aim at profundity."

So specialization, while impoverishing the individual, has enriched the profession. What the specialists have lost, medicine has gained. The artists have become smaller but the art greater. The individual has sacrificed scope to depth, "comprehensiveness" to "profundity"; that is, he has sacrificed himself to his profession, but such a sacrifice ennobles the specialist.

I suppose it will not be questioned that, however varied Sir Isaac Newton's attainments were, he was preëminently a specialist. Well, when in 1687 he formulated the theory of gravitation, he unfolded a thought of the divine mind,—he revealed one of the processes of Nature. With becoming reverence, we may say that God had enacted, from the beginning of time, as one of the conditions of the existence of matter, that every body in the material universe should attract every other body with a force directly as its mass and inversely as the square of its distance. Newton revealed this law. This is science, a glimpse of God's purpose, a divine thought explained to us. So Epictetus was a specialist on a higher plane and revealed some of the laws of spiritual life. So, too, Pasteur, in ascertaining the bacterial origin of disease, established medicine on a truly scientific foundation and added a uniformity of method, which medicine had never had, to a uniformity of purpose, which it had always had. Perhaps, too, in a similar way, psychology may come to the aid of religion and formulate a universal belief and establish a uniform system of worship. These are the high prizes of specialization, these and others like them. Not every specialist may bear such a message;

it is not given to every man to reach Corinth, but every specialist is, after the spirit, of the kin of Newton and St. Paul and Pasteur and Wm. James.

In taking for my theme the remark of Professor Thompson, it was not my purpose to dispute his statement, but to expand it by showing that the impoverishment of the individual is the result not only of premature specialization, but, indeed, of all specialization as such. That premature specialization degrades also the science that is specialized is likewise incontrovertible, but I have preferred to dwell rather upon the benefits that accrue to science from wise and legitimate specialization,—such specialization as proposes to itself the advancement of science only, even by the sacrifice of the individual.

Now the question naturally arises, Is the sacrifice of the individual inevitable, or does there exist some way to reconcile these two seemingly opposite tendencies? Perhaps, if we were to consider them, as regards the individual, not as antagonistic but as complementary, the difficulty of reconciliation will seem less hopeless, or rather they will require not so much reconciliation as adaptation. We may recognize the paramount claim of medicine without wholly forfeiting the privileges of the individual. This is not a divided but a concurrent allegiance. Similarly our duties to society, while they transcend our duty to ourselves, do not obliterate that duty. While the principle of personal liberty is subordinated to the supremacy of the general welfare, it may yet be maintained that the liberty of the individual is not thereby annulled. The two principles coexist in perfect concord: the general principle is the ergon, the individual principle, the parergon;

one the vocation, the other the avocation. The practical question is, What do we do with our leisure hours? for Apollo's bow is not always bent.

It is interesting to note some of the forms which this relaxation has taken among men of eminence. Cicero was a zealous antiquary, besides further occupying his leisure with poetry, horticulture, and philosophy. Boccaccio and Petrarch were enthusiastic collectors of ancient manuscripts. There is no doubt that Francis Bacon considered his philosophic researches subordinate to his legal work, though in the latter he deserved and achieved infamy, and in the former he established a firm basis for the effective study of the physical sciences. While fulfilling the humble duties of a Bavarian priest, Mendel's recreation consisted in experimenting with plants until he discovered the law that governs the transmission of hereditary traits. Thirteen years after Sir Walter Scott was admitted to the bar, he published his first poem, *The Lay of the Last Minstrel*, and thenceforth his avocation became his vocation, to the glory of literature and perhaps without much prejudice to the law. Virchow, the founder of cellular pathology, employed his leisure in making a decided impression on the politics of his country, since for forty-five years he was a member of the Prussian *Landtag* and for thirty years a member of the German *Reichstag*, where he was one of the leaders of the Liberal Party. Dr. Holmes always considered anatomy as his vocation and literature as his amusement. Christopher Wren was a physician who had many diversions: Astronomy was one and he became Professor of Astronomy at Oxford; architecture was another and he designed the Cathedral of St. Paul; military engineering was a third and in 1663 he designed the fortifications of Tangier.

Military engineering seems to have been the paragon of many professional men before it became itself a recognized specialty of military science. The fortifications which Michelangelo designed in a vain attempt to keep the Emperor Charles V. out of Florence are still visible in part on San Miniato. Francis I. of France employed that delightfully audacious egoist, Benvenuto Cellini, to fortify Paris, and afterward, on Benvenuto's return to Florence, he fortified that city against the men of Siena. Cellini also says that he was assigned by the Pope to defend the castle of San Angelo against the imperial forces. Vasari tells us that Andrea Pisano, the sculptor, also was engaged to fortify Florence, and Galeazzo, the architect, to fortify the harbor of Genoa. Perrault, the architect who designed the eastern façade and the colonnade of the Louvre, was a physician, and his work is still considered the most perfect achievement of architecture in France.

When Richard Blackmore first engaged in the study of medicine, he asked Dr. Sydenham what books he should read, and Sydenham directed him to read *Don Quixote*, "which," said he, "is a very good book. I read it still." Dr. Johnson condemns this answer by saying: "The perverseness of mankind makes it often mischievous in men of eminence to give way to merriment; the idle and the illiterate will long shelter themselves under this foolish apothegm." But the manifest purpose of the advice was to employ idleness and to expel illiteracy, and it would be difficult to make a better suggestion in so few words. Candor, however, compels us to admit that these words, coming from Sydenham, who read no medical books at all, might have been meant to convey the conviction that the way to learn medicine was not by reading, but by practical

bedside observations; and that books of general literature were of greater practical service to a physician than any books that had been up to that time written on medicine. This is, of course, now no longer true of medical books.

These are some of the avocations by which men, busied in other professional work, have benefited humanity. I do not intend to make a list of these by-products,—of these periods of relaxation profitably employed in the general interest of the race. I am merely considering the enlarged scope that such collateral and subordinate pursuits give to the individual, opening up to him whole spheres of personal culture, and neutralizing the tendency of specialism to contract his interests and narrow his life to the exact boundaries of his work; and it seems to me that the specialist may, without prejudice to his art, emulate the example of Prospero in laying down at times his conjurer's wand and taking off his magician's mantle, while he devotes a period of his time to his greater personal needs and looks abroad over the world with opened eyes.

And there is one aspect of the matter that is perhaps considered less frequently than it deserves to be, which follows on De Quincey's remark concerning "the generalizing principle that secures the unity of the science." A specialty is necessarily but a part of the whole, as the eye is a part of the body, and is of value, not for itself, but for its relation to the whole. Moreover, as each part of the body is not only related to the body as a whole, but also to every other part, so different branches of science are in the same way not only related to science—that is, to exact knowledge as a whole, but also to all the other sciences. All departments of knowledge are thus seen to be inter-related in the same way that

medical specialties are inter-related, and thus each specialty, when considered in its proper light, is seen to be clearly dependent upon all other specialties for their reciprocal illumination. So, it seems to me, if we accept the truth that the researches of the specialist are necessary to the development of science, we may not easily dispute the converse proposition, that a knowledge of the whole is equally essential to the proper development of the specialty. Thus the various professions themselves mutually react upon and illustrate each other, and man, by these relations, is brought into contact, if he will only see it, with all knowledge. Montaigne says that "there is so great relation among wise men that he who dines in France nourishes his companion in Egypt," and the Stoics were wont to say that "a wise man cannot so much as hold up his finger, in what part of the world soever he may be, but all men on the habitable earth feel themselves sustained and uplifted thereby." The figure may be a bit fanciful but the truth is not to be questioned.

It is true, then, that if a man knows nothing but his specialty he cannot know even that. At least he cannot know it as it ought to be known, and it is possible that many specialists neglect to understand the relations of their specialty to other coördinate branches of knowledge and to appreciate its dependence upon them. And it is equally true that the high impulse of our nature toward that symmetrical perfection which on its intellectual side we call culture and on its moral side character, is not an impulse that can be safely stifled or thwarted.

II

PHYSICIANS AS MEN OF LETTERS

AMONG the many avocations of physicians, letters have been by no means neglected, and the various excursions that several of our contemporaries have made into the spacious field of polite literature, very naturally direct our attention to those members of our profession who have exceeded the narrow bounds of professional attainment, and have established themselves in the heart of humanity by their contributions to humane learning. Thomas Sydenham we may scarcely reckon among men of letters, or John Bell, or Sir Charles Bell, or Boerhaave, or Cullen, or John Hunter, or Cheselden, for they never stepped out of the narrow paddock of medicine into the open liberty of humane letters, although the work that some of them accomplished in medical literature must easily show their fitness for a broader field if they had ventured into it. Benjamin Rush, for one, did cover a wider area and discuss larger topics, but in him, too, the man of letters was strictly subservient to the medical practitioner, and utility and instruction were rather his aim than sweetness and light. So few are they who have entered literature through the gateway of medicine, that it seems almost as if Apollo had disinherited his son Æsculapius. Of these few, the greater part are not

especially known by their achievements in the field of medicine, for their actual connection with the profession was casual and obscure.

John Keats, for instance, was apprenticed to a surgeon at Edmonton, in 1810, at the age of fifteen; completed his apprenticeship at the age of twenty, and went up to London in the hope of receiving hospital instruction, "walking the hospitals," as it was termed. Surgery was then considered the very inferior handmaid of medicine, and surgeons received apprentices as silversmiths and brewsters did. In London, at the age of twenty, he made the acquaintance of Leigh Hunt, Hazlitt, and Shelley, and discarded the lancet for the pen. Five years later he died, and his *Lamia*, *Hyperion*, *Ode to a Grecian Urn*, and *Eve of St. Agnes* attest the wisdom of his changed purpose, and set his name in the very front rank of British poets. Plutarch tells us that Archidamus jeered at Periander for abandoning the glory of being an excellent physician, to gain the repute of being a very bad poet. Mr. Keats, on the contrary exchanged the practice of a mere mechanic art, in which eminence was intrinsically denied him, for an honorable seat among the greater divinities of human genius, and it is probable that this change in his life was due directly to the advice of Leigh Hunt, who thus rendered a service of incomparable merit to humanity.

Smollett, also, served his apprenticeship to a surgeon, and, in default of any other means of subsistence, took the berth of surgeon's mate on a British ship-of-war. His service lasted for several years, and he was present at the siege of Cartagena in 1741. During this time, as Sir Walter Scott says, he acquired "such intimate knowledge of the nautical world as enabled him to

describe sailors with such truth and vivacity that, whoever has since undertaken the same task, has seemed to copy Smollett rather than nature." Fenimore Cooper, Marryat, Clark Russell, and Jacobs followed, as well as they could, in Smollett's footsteps, but no later work has equaled in genuine excellence the *Roderick Random* and the *Peregrine Pickle* of the surgeon's mate.

Goldsmith, that dissolute and improvident genius, pursued nearly all known vocations as well as that of medicine. He entered Trinity College, Dublin, at the age of seventeen, and, as a sizar, paid for his tuition and board by performing such menial duties as sweeping the halls and waiting on table. These duties, while menial, were by no means degrading, and many excellent and some eminent men have been indebted to such work for their education, but Goldsmith was never able to learn anything, I will not say minutely, but even with an approach to exactness. In spite of the degree of M.D. which he pretended he had received at the University of Padua, he maintained obstinately and even angrily that he chewed his food by moving his upper jaw. It would have been infinitely humiliating to any one with less exuberant and irrepressible vanity than Goldsmith, to realize his successive failures, which could not, even in the partial judgment of his admirers, be reasonably ascribed to any other cause than to his buoyant incompetence. He was reprimanded and plucked, disgraced and degraded in college, and although he received his degree of Bachelor in Arts, yet a more pitiable and less promising scholar surely never obtained a degree from any reputable university.

He could play on the flute, and he was proficient in singing Irish songs. After failing in the study of law, theology, and medicine, as destitute as a beggar, he

wandered over Europe, playing on the flute for supper and bed, and living on the alms which he received at convent gates during his ramblings. Aimless and irresponsible, an inveterate gambler, lazy and sensual—for he never lost his fondness for hired embraces, and the attractions of sexual pleasure always appealed to him overpoweringly—he was meanwhile collecting the material for *The Traveler*, *The Deserted Village*, and *The Vicar of Wakefield*. Then came fortune and knocked at his door. Then came friends; and such friends! One would envy the position of a tapster or a drawer at the "Mermaid" in Cornhill, where Shakspere, Jonson, Fletcher, and Beaumont drank their wine and discussed Montaigne and Rabelais; the best of us would have been proud of a servant's place in Button's Coffee House or Will's in Russell Street, where one could have listened to the conversation of Swift, Steele, Gay, Addison, and Arbuthnot, while they read aloud the third book of Mr. Pope's *Dunciad*, or Dr. Swift's *Tale of a Tub*; but the friends of Dr. Goldsmith at the "Mitre" were no less distinguished. Edmund Burke, Edward Gibbon, David Garrick, Dr. Johnson, and Sir Joshua Reynolds formed surely as illustrious a company of men of letters as ever met together in esteem and affection on this earth. They all loved him. He compiled a *History of Rome*, which paid him \$1500, a *History of England*, which brought him \$3000, and a *Natural History*, for which he received \$4000. His histories were filled with distortions and inaccuracies, and his *Animated Nature* with myths and canards; but the easy, noble flow of his graceful English style covered all imperfections in other matters, and his histories only augmented his fame. Dr. Johnson ridiculed his pretensions to writing natural history by saying that

"Goldsmith's knowledge of zoölogy was just sufficient to enable him to distinguish between a horse and a cow." But the wealth of Tarapacá would have been too little to pay his gambling debts and his improvident gifts to his temporary mistresses, and destitution and disgrace dogged his steps.

It seems that always, when in the lowest extreme of penury, he recurred to the practice of medicine as a last resource. When he had returned to England from the strolling beggary of his continental life, he had applied to the all-powerful East India Company for a subordinate medical berth, and had obtained it on the strength of his own pretensions and perhaps through the favor of some unwary patron, but he was almost immediately dismissed, and his dismissal was doubtless due to his incompetence to discharge his duties, for soon afterward, having presented himself for examination for the humble position of surgeon's mate in the navy, he was found unfitted even for a post so subordinate and was promptly rejected.

So, now, when his excesses and his gambling and his indiscreet generosities had again impoverished him, he started out to practice medicine, and announced his readiness to visit, receive, and prescribe for patients. But none came. Even his friends and admirers would not submit themselves to his professional care. They must have known his scanty attainments. Topham Beauclerk recommended him pleasantly to "prescribe only for his enemies." In accordance with this advice, Macaulay says, he prescribed for himself, and soon passed beyond the reach of real physicians. He was forty-five years old when he died. Gifted with a wonderful literary genius, he was a parasite upon the profession of medicine.

Warton tells us, in his *History of English Poetry*, that Sir John Mandeville, the great Eastern traveler, who has been called the "father of English prose," was a physician, as was also Dr. Andrew Borde (1530), whose skill in facetious discourses at country fairs gave him the title "Merry Andrew," which has descended, with some increment of scurrilous implication, to our own time.

Sir Samuel Garth was a prosperous and skillful London physician, who supported, eagerly and ably, the proposal to establish public dispensaries for the protection of the sick poor from the greed of the apothecaries. Indeed, he wrote a poem on the subject, called *The Dispensary*, which ran through three editions in a year and secured him fame and position. He was twenty-nine years old when it appeared, and although he gave cause for hope that he might eventually rival Blackmore in dullness, yet he did very little other literary work. He, however, wrote the Epilogue for Addison's *Cato* when it was brought out at the Drury Lane Theatre, and some years after he had the distinction of delivering the Harveian oration. It was not because *The Dispensary* was good that it had such a large initial sale; it was because it chanced to handle a popular theme at an opportune time. It has long since fallen into the dim limbo of oblivion, but no other fate was possible for the kind of poetry that it contains, some of the best of whose lines are the following: He marvels

"How the same nerves are fashioned to sustain
The greatest pleasure and the greatest pain;
How the dim speck of entity began
To extend its recent form and stretch to man;
How matter, by the varied shape of pores,
Or idiots frames, or solemn senators."

And yet Pope neglected to pillory Garth in the *Dunciad!*

Sir Richard Blackmore had a worse fate, for Pope did not scruple to include this eminent physician among the disciples of "Dullness." Blackmore merits the distinction of introducing perhaps the most debasing simile that can be found in the whole range of serious poetry, when he likens thunder to intestinal gas forcing a vent. Blackmore speaks of the thunder—

"Pent in the bowels of a frowning cloud
That cracks—as if the axis of the world
Was broke—"

Sir Samuel Smiles, the author of *Self-Help*, *Thrift*, and *The Life of George Stephenson*, took his M.D. degree in Edinburgh in 1832, the year Sir Walter Scott died.

Marat, the associate of Danton and Robespierre, the "Ami du Peuple," the universally execrated Marat, who was reviled by Carlyle and by all historians of the French Revolution, the *bête féroce* who was feared and hated as the embodiment of the fiercest and most blood-thirsty faction of the Jacobins, was a physician. Born in Neuchâtel, educated in Bordeaux, we first find him practicing his profession in a fashionable district in London. Michelet could not discover that Marat had any right to the title of Doctor of Medicine, but it seems reasonably certain that he was made an M.D. of St. Andrews University, Edinburgh. He opposed the philosophy of Helvetius, who derived all virtues from self-interest, and Voltaire himself did not despise him as an antagonist. Politics, philosophy, social science, education, and medicine were equally the themes upon which he exercised his prolific pen. His fame as a

physician was great; the extent of his learning was really great. The Comte d'Artois, afterwards Charles X., made him physician to his guards at a good salary. The language of his commission is interesting. It states that d'Artois desired his services, "because of his good and moral life and of his knowledge and experience in the art of medicine." He returned, then, to Paris, where his influence in the scientific world was second only, perhaps, to that of Benjamin Franklin, who often visited him and discussed questions of light, heat, and electricity with him. Goethe admired him. There never lived a man more devoid of the sentiment of fear than Marat, nor one more devoted to the prosecution and propagation of his principles, nor, indeed, one more implacable and relentless. This turned him into the ruthless monster of whom the earth was well rid by the dagger of Charlotte Corday. At his death the whole world drew a deep breath of relief. He had become the incubus of France.

Mark Akenside, who wrote *The Pleasures of the Imagination*, and whom the great Dr. Robertson admired and courted, took his degree of M.D. in Leyden, which, on account of the presence and prestige of the great Boerhaave, was at that time the most famous university in Europe. He practiced medicine first in Northampton and later in London. Then, in 1753, the University of Cambridge bestowed on him the degree of M.D. The next year he was elected a fellow of the College of Physicians; in 1755 he delivered the Gulstonian lectures, in 1756 the Croonian lectures; in 1759 he was chosen chief physician to St. Thomas's Hospital; in 1760 he delivered the Harveian oration. Before this period of professional glory, he had written *The Pleasures of Hope* and the *Odes*, and now he increased his reputation

by a series of essays and reviews which were published in Dodsley's *Museum* and established the repute of that publication.

Abraham Cowley wrote an epic romance on *Pyramus and Thisbe* at the age of nine, and at fourteen he published a volume of poems which at once made him famous. Pope says of himself that

“He lisped in numbers and the verses came,”

but Cowley is the most conspicuous instance of poetical precocity that the world has seen. Even Milton and Chatterton must yield to him on this point. He was a contemporary of Milton and of Sir Thomas Browne, a little younger than Browne and a little older than Milton. He was noted for his varied scholarship. Milton did not disdain to borrow from Cowley any more than from Robert Burton, likewise a contemporary. Cowley's fame exceeded Milton's as Chapman's exceeded Shakspere's and as Glück's surpassed that of Bach, in the opinion of their contemporaries. In all three cases posterity has reversed this judgment. Sir John Denham, in his *Ode on the Death of Cowley*, commends Shakspere, indeed, but proclaims his inferiority to Cowley. When Dr. Johnson was invited by the “forty first booksellers” of London to write biographical notices of the British poets, they decided that British poetry began with Cowley, and so his is the first of Johnson's *Lives*.

Lessing, the author of *Laocoön* and the *Dramaturgy*, was destined to the career of a physician, though he never practiced medicine. Schiller was a regimental surgeon. The elder Scaliger was a physician, so was Christopher Wren; so also was Charles Lever, who practiced medicine in Brussels and left us in *Charles*

O'Malley a better description of the battle of Waterloo than even the more famous one by Victor Hugo. Locke the philosopher was a physician, and so was George Crabbe the poet.

In our own days the medical profession has contributed to literature the names of Oliver Wendell Holmes, John Brown, William H. Drummond, Weir Mitchell, Virchow, J. G. Holland, Clemenceau, and Conan Doyle—names of varying excellence, and none of them, save that of Holmes, of especial magnitude, but they are not only the best, they seem to be all that we can offer.

There remain four names which we must consider briefly—four of the eminent names in literature—Rabelais, Sir Thomas Browne, John Arbuthnot, and Holmes. For each of these a whole volume would be inadequate. All were eminent as physicians, all achieved enduring fame as men of letters.

Rabelais is conceded to be perhaps the most learned man of whom we have a record. Like Gibbon, he was the author of one book. The first complete edition of this was published in 1567, and the next generation saw sixty editions printed—a new edition every six months for thirty years. Many eminent scholars have devoted themselves entirely to explaining and annotating Rabelais. He has been the admiration and the despair of mankind. He is read in all tongues. After his death none were admitted to the degree of Doctor of Physic at Montpellier who had not first put on the gown and cap of Dr. Rabelais, which are still preserved in that city. To-day when the French wish to describe a perfectly well-educated man, a man of universal attainments, they do not say "he has such and such degrees," or "he belongs to the Academy," but "he knows his Rabelais," as if to know one's Rabelais were

a higher encomium than could otherwise be expressed in a single phrase.

Rabelais was a Franciscan monk. He resided with the Franciscans for twenty-five years. He became displeased with the monotonous austerities of the order, was released from his vows by Clement VII., on application of his friend Geoffroy d'Estissac, Bishop of Maillezais, and entered the order of Benedictines. Discontent again overcame him, and a growing disgust with the practices of the Church, and at the age of forty he entered the University of Montpellier. He was entered as a student in medicine on the sixteenth of September and took his degree on the first of November of the same year. The next year we find him lecturing publicly on medicine at the university. There can be but one explanation of the facility with which he satisfied his teachers of his proficiency in medicine. The University of Montpellier was a rigorous and famous school, and this middle-aged monk could claim no partiality and expect no personal complaisance, but Rabelais's knowledge was so wide and, at the same time, so exact, that in the course of his general reading he had unconsciously prepared himself for a critical examination even in technical subjects, and his proficiency was so complete that the faculty of the university were compelled to acknowledge his attainments and award him his degree.

From this time he practiced medicine and wrote his *Pantagruel* simultaneously. As a physician he was honored during his life, and at his death he left a work which for over three hundred years has been the delight of mankind. It is no excessive praise to say that French literature is more indebted to Rabelais than English literature is to Shakspere. Indeed, we can

26 Recreations of a Physician

only imagine how greatly Shakspere himself must have reveled in Panurge and Friar John, with whom he was certainly acquainted.

Francis Bacon, in his *Advancement of Learning*, says that, in his day,

imposture was frequently extolled and virtue decried. Nay, the weakness and credulity of men is such that they often prefer a mountebank or a cunning woman to a learned physician. . . . And therefore one cannot greatly blame physicians that they commonly study some other art or science more than their profession. Hence, we find among them poets, antiquaries, critics, politicians, divines, and in each more knowing than in medicine.

And yet among Bacon's contemporaries we can discover no man, eminent in letters, to whom this remark can properly have been applied, for of the twenty-nine poets and dramatists who were born between 1553 and 1586, between Anthony Munday and John Ford, I do not know of one who was a member of the medical profession, Sir Thomas Browne himself being but twenty-one years old when Bacon died in 1626.

Perhaps no man ever gave the history of his own mind and unfolded the intricacies of his own thoughts more fully than did Sir Thomas Browne in his *Religio Medici*. Montaigne makes disclosures whose naïveté causes a smile of pleasure that deepens almost into affection, but you are aware of the existence of thoughts, which you are not asked to share, and of apartments which you are not invited to enter. Rousseau poses, and, while commanding his own virtues, confesses only the most harmless or the most universal of faults, which seem to lose all their odium when acknowledged by so virtuous and so superior a being. Sir Thomas discloses

his own mind indeed, but he seems not to observe current events. During the whole period of the struggle of King Charles with the Parliament, and his betrayal, trial, and death; during the protectorate of Cromwell and the subsequent contest between Lambert and Monk; during the Restoration and the reign of the Merry Monarch, Charles II., he was quietly engaged in practicing his profession in Norwich. Of all these momentous events he seems to have noted nothing, he has left no written comment or reported criticism on any one of them. They overcome him like the summer's cloud without his special wonder. He seems to have been obnoxious neither to the Cavaliers nor to the Roundheads, to have accepted the usurpation of Cromwell and the restoration of Charles with equal silence and indifference.¹ The overthrow of a kingdom seems to have held no disquietude or even interest for him. Perhaps more than any other man then living in England, Sir Thomas Browne, with his calm eye, his clear mind, and his lucid style, might have explained for posterity the austere virtue and the unexampled diplomacy of Cromwell, one of the greatest and most misunderstood men of history, but the study of that complex character had no attractions for him. The *Hydro-taphia*, indeed, was written at the very time (September 3, 1658) when Cromwell died, but the fears, perplexities, and apprehensions that Cromwell's death excited are not his theme, but the discovery of some ancient pottery that was unearthed in Norfolk.

¹ May it perhaps be true that Browne imitated Atticus in attaching himself to neither party but in relieving the necessities of the individuals of both? Atticus was on terms of friendship with both Cæsar and Pompey, with both Hortensius and Cicero. Sir Matthew Hale also steered a similar course during the whole continuance of the civil war.

Browne's *Religio Medici* is a book that every educated man should read—a book that every medical man should know. To read extracts from it would be to emulate the pedant in Hierocles, who, having a house for sale, carried a brick in his pocket as a sample. His style is that of the prose writers of his age, the age of Jeremy Taylor, of Robert Burton, of Roger L'Estrange, of Milton, and of Bacon, that noble period of English prose among whose masters Browne is one of the most eminent. Highly imaginative and poetical, draped in metaphor and laden with quotation, his style is yet clear, majestic, and splendid. It has been declared that "the concluding chapter of his *Hydriotaphia* can hardly be paralleled in the English language for richness of imagery and majestic pomp of diction." Thackeray tells us that Montaigne and Howell's *Letters* were his bedside books, books that he read o' nights when sleepless. The *Religio Medici* might well be the bedside book of physicians, to be read with appreciation and delight.

John Arbuthnot took his degree of M.D. at Aberdeen. He then went to London and, while waiting for patients, supported himself by teaching mathematics. He translated from the Dutch the essay *On the Laws of Chance, or a Method of Calculation of the Hazards of Game*. Next he wrote a critical essay *On the Deluge*, another *On the Usefulness of Mathematical Learning*, a monograph entitled *An Argument for Divine Providence*, and in 1705 he compiled a comparative table of Greek, Roman, and Jewish measures. Still, professional progress was slow. His reputation for learning was becoming established, his fame as a wit was growing, but patients avoided him and money was scarce. About this time he happened to be in Epsom while Prince

George of Denmark, the husband of Queen Anne, was there. The Prince was taken suddenly ill and, for want of any other physician, Arbuthnot was called in the emergency. His delicacy, his kindness, his composure, and his skill captured the royal heart and Arbuthnot's future was assured. He continued the Prince's physician as long as the royal patient lived. Soon after, at the Queen's urgent request, he was appointed her physician extraordinary, and never again had to complain of the indifference of patients or of the neglect of fortune. Those were happy times for literary men. Macaulay has narrated, in his essay on Dr. Johnson, the marked favors that were lavished on authors of the time of Queen Anne.

There was perhaps never a time [he says] when the rewards of literary merit were so splendid—when men who could write well found such easy admittance into the most distinguished society and to the highest honors of the state.

Of all the array of authors that illuminated the reign of Queen Anne, no one exceeded Dr. Arbuthnot in the depth of his learning, the brilliancy of his wit, or the warmth of his heart. Dr. Johnson once remarked in speaking of the eminent writers in Queen Anne's reign:

I think Arbuthnot the first man among them. He was an excellent physician, a man of deep learning and of much humor. Addison was, to be sure, a great man, though his learning was not profound. But his morality, his humor, and his elegance of writing set him very high.

Thackeray admired and honored Arbuthnot above all his contemporaries. In 1712 he wrote the famous satire, *The History of John Bull*, which even now, when the wars of Marlborough seem to belong to the dim

background of ancient history, will well repay the reading. *The History of John Bull*, whence originated the cant phrase applied to-day to the people of Great Britain, is a political satire, very similar in structure and merit to Swift's *The Tale of a Tub*, which was published in 1704.

Two years later he assisted in forming the "Scriblerus Club," which also comprised Pope, Gay, Swift, Atterbury, and Congreve, and yet the best work that remains to us of this cluster of men is conceded to be that of Arbuthnot. The first book of the *Memoirs of Martinus Scriblerus* ranks as one of the finest pieces of sarcastic humor in the language. His *Virgilius Restauratus*, published with the second edition of Pope's *Dunciad*, is a remarkable fragment of emendations and corrections of Virgil, written in a playful vein, but with an insight and spirit that make it almost earnest and wholly stimulating. In 1723 he became one of the censors of the Royal College of Physicians, and in 1727 he had the supreme honor of delivering the Harveian oration. He died, lamented by his friends and full of honors, in 1735, being nearly seventy years of age.

I do not desire to protract this paper unduly, but I wish to make a single reflection upon the age of Queen Anne. It was essentially an age of superficial affectation. Its most eminent figure was Pope, whose ascription to himself of all the virtues blinded the eyes of generations of men who took him at his assumed value, but he was merely the chief among a throng of triflers, for it was an age of triflers. His *Essay on Man* illustrates his facile versification, his skill in antithesis, and his meager soul. His most finished poem, *The Rape of the Lock*, is a trifle, built upon the most insignificant of trifles, the theft of a lock of Mrs. Arabella Fermor's

hair. What a magnificent theme! Yet the Earl of Roscommon surpassed him. He wrote poems *On a Young Lady's Cold*, *On a Dead Lap-dog*,—themes not only trivial but nauseating. The *Spectator* is a collection of elegant trifles. Contrast Addison's *Sir Roger de Coverley* papers with Milton's *Areopagitica*, or Addison's *Campaign* and *Cato* with Milton's *L'Allegro* and *Il Penseroso*. This change of tone and of ideals was due primarily to the influence of Charles II., the "Merry Libertine," who attracted men to license, and afterward to the gloomy bigotry of his brother James, who repelled them from virtue.

Charles II. flaunted his mistresses shamelessly before an indulgent nation. A woman of easy virtue, passing through the royal arms, became ennobled, and Barbara Palmer became the Duchess of Cleveland and Louise de Querouaille, the Duchess of Portsmouth. Charles had so little self-respect as to receive, when on the throne, a pension that Louis XIV. had refused him when an exile. He was bribed by a mistress whom Louis sent him into refusing the righteous aid which Holland expected against the unjust invasion of the French king. Literature was degraded as public morals degenerated. Under the Commonwealth "the Bible lay on the table of the House of Commons, and its prohibition of swearing, of drunkenness, of fornication, became part of the law of the land. Adultery was made felony without the benefit of clergy." History presents no greater contrast than exists between the morals of the Commonwealth and those of the Restoration. Debauchery, cynicism, sacrilege, the open display of immorality in all its forms, succeeded to the stern virtue of the Puritans. The Restoration was a reeling orgy of shamelessness and brutality. Lord Rochester was a fashionable

poet, but even the titles of some of his poems must be left unuttered. Sir Charles Sedley was a fashionable wit, but he was hooted and stoned by the very porters of Covent Garden for the foulness of his language. The Duke of Buckingham consummated the seduction of Lady Shrewsbury by killing her husband, while the Countess, disguised as a boy, held his horse for him and assisted at the murder.

And this was the age that ushered in Pope, Addison, Congreve, and Steele. In Pope there was no tenderness no happiness, no serenity. He was an adroit versifier. He knew well the mechanic part of poetry, but there was in him no human sympathy, no aspiration, no depth, no sweetness. Even generous vices were denied him, and as for virtues, he had only the faculty of simulating them awkwardly. Malice and envy were the breath of his nostrils, and sarcasm his natural utterance. This is what made his *Dunciad* so good. He wrote libels on Chandos, Aaron Hill, and Lady Mary Wortley Montagu, and then, as Taine says, he lied when he was obliged to disavow them. Dr. Johnson tells us that he hardly drank tea without a stratagem. He was never frank, always acting a part, and pretending virtues which he had heard admired.

And what is true of Pope is also true of his contemporaries and admirers. There were only two genuine men among the men of letters who graced the classical age of English literature, Swift and Arbuthnot, and Swift was a misanthrope who passed into chronic dementia. The only sane, clear, virile mind; the only wholesome human heart among those who are best described as the wits of Queen Anne's reign was John Arbuthnot. Addison was a man of supreme taste, and earned the distinction accorded him by Macaulay and

Thackeray, of making morality fashionable, which Dr. Johnson afterward made universal. Pope was a poet of faultless technique, Swift of magnificent intellectual power, Steele of very excellent though irregular impulses, but Arbuthnot alone, in addition to these qualities, was also a man of virtue, dignity, and nobility of sentiment—a well-poised and accomplished man of letters and man of the world—and yet even Arbuthnot was a product of this shallow, frivolous age.

There remains then, Oliver Wendell Holmes, a name loved and venerated by two generations of physicians and admirers. Some of us may say of him, as Ovid says of Virgil and Scott of Burns, "Vidi tantum." A few of us know how genial and how courteous was his manner, how gentle his irony, how just his criticism, how fine his professional ideals, how nobly modest and unobtrusive his life. There have been names more eminent than his in letters, names more famous than his in medicine, but neither in medicine nor in letters has there lived a man who cultivated either with more purity of life, more nobility of purpose, more sympathy of heart. Dr. Johnson says that Garrick's death eclipsed the gayety of nations and impoverished the public stock of harmless pleasure, but Garrick's work was ephemeral and his life a breath; while Holmes's work was enduring and his life a continual inspiration to earnestness and cheerfulness. What delight he has given us! How charmingly he soothes the asperities of life! His sincerity is as invigorating as his humor is delicate. There is a fine aroma in all his work. It is the aroma of virtue. We know the "Autocrat," and the "Professor," and the "Poet" as we know our friends, and in knowing them we have enlarged the

circle of our friendship. The sarcasm of coarser natures becomes gentle irony in Holmes. How pleasantly he rebukes quackery and vice! His short lecture on "Phrenology," which is still too long for full quotation here, is an illustration.

I shall begin, my friends, with the definition of a pseudo-science. A pseudo-science consists of a nomenclature with a self-adjusting arrangement, by which all positive evidence, or such as favors its doctrines, is admitted, and all negative evidence, or such as tells against it, is excluded. It is invariably connected with some lucrative, practical application. Its professors and practitioners are usually shrewd people; they are very serious with the public, but wink and laugh a good deal among themselves. The believing multitude consists of women of both sexes, feeble-minded inquirers, political optimists, people who always get cheated in buying horses, philanthropists who insist on hurrying up the millennium, and others of this class, with here and there a clergyman, less frequently a lawyer, very rarely a physician, and almost never a horse jockey or a member of the detective police. I did not say that phrenology was one of the pseudo-sciences.

A pseudo-science does not necessarily consist wholly of lies. It may contain many truths, and even valuable ones. The rottenest bank starts with a little specie. It puts out a thousand promises to pay on the strength of a single dollar, but the dollar is very commonly a good one. The practitioners of the pseudo-sciences know that common minds, after they have been baited with a real fact or two, will jump at the merest rag of a lie, or even at the bare book. . . . I did not say that it was so with phrenology.

He condemns quackery, you see, but he condemns it with a smile, and we, with him, smile as we condemn it. We may find purer fun in Thomas Hood than *My*

Aunt, *The One Hoss Shay*, or *The Height of the Ridiculous*, but no simpler pathos than *The Last Leaf*, and no finer fancy than *The Chambered Nautilus*, while his prose recalls that of De Quincey—without its glitter, indeed, but with a warmer utterance.

To-day, when the tendency of professional practice is so strong toward the subdivision of activity into ever-narrowing specialties,—when we lose in scope what we gain in intensity, it is not amiss to raise our eyes at times and look about us at those who have held aloft, with equal grasp and steady hands, the two torches of medicine and literature.

III

BANQUO

POR^{TIA} was not very lucky in her suitors, and perhaps fortune favored her in selecting Bassanio and rejecting the Princes of Morocco and Aragon,—Hazlitt at least objected entirely to the Prince of Morocco,—and yet, while Bassanio may have been an attractive suitor, he had certainly proved himself a dangerous friend. Suppose for a moment that he had failed to win the heiress. The *Merchant of Venice* would have become a tragedy instead of a comedy, or rather, it could never have been written at all, for perhaps even Shakspere could not have recorded the death of Antonio without exciting disgust instead of pity. And yet it is true that Portia had little skill in men. No more could she distinguish of a man than of his outward show. Bassanio had already squandered his own estate upon his pleasures, he had impoverished Antonio, and he finally begged his friend for three thousand ducats more, to buy a last stake in the great Portian lottery. Bassanio witnessed the bond by which Antonio pledged his life on the payment of the money, and then proceeded to forget the date of payment and the peril of the penalty, added a few more useless servants to his retinue, and proceeded to Belmont with a light heart to his uncertain wooing. Bassanio, we must confess,

was a perilous friend. Let us hope that Portia never found out how selfish he really was.

In Shakspere, as in life, the finest parts are not always taken by those who bear the highest titles, and the subordinate characters are often drawn with a few firm, masterly touches. They are thrust before your eyes, living, breathing men; you feel the reality of their presence; you listen to them eagerly, and in a moment they are withdrawn to give place to others. Garrulous old women, like Juliet's nurse, breathless messengers with eager faces, murderers steeped in the colors of their trade, innocent children, charming maidens,—they come suddenly before you, empty their hearts without restraint, and vanish. Brief their transit—briefer even than life. What a noble list of the secondary characters could be made! Hotspur, Mercutio, Horatio, Gonzalo, Kent, Tranio. And they are all as admirable for their perfect subordination as for their perfect distinctness. Dryden mentions a tradition, which might easily reach his time, of a declaration made by Shakspere, "that he was obliged to kill Mercutio in the third act, lest he should have been killed by him." Dryden, in crediting this tradition, failed to comprehend the significance of Mercutio's death, upon which, as Coleridge remarks, the whole catastrophe depends. Without Mercutio, *Romeo and Juliet* would become a comedy, as, without Portia, *The Merchant of Venice* must have become a tragedy worthy of the violent and bloody hand of Marlowe or Kyd.

It seems that Shakspere himself was at times uncertain whether the titles of some of his plays were sufficiently representative, for Malone proved from the papers of Lord Harrington, the treasurer of James I.,

that *Much Ado About Nothing* was also called "Benedick and Beatrix," that the *First Part of Henry IV.* was performed at court under the title "Hotspur," and that the *Second Part of Henry IV.* was also entitled "Sir John Falstaff."

But among these subordinate characters, these stars of the second magnitude, Banquo seems to shine with especial brilliancy. The old Scottish chronicles associated Banquo (Bancho) with Macbeth in the murder of Duncan. The story came down through Fordun, Boethius, Holinshed, and George Buchanan without any variation in this incident. In Shakspere's hands, however, Banquo acquires a personality that the chronicles denied him. He is no longer an accomplice, he becomes the voice of Macbeth's conscience. Shakspere made him a frank, loyal soldier of unstained life and of transparent rectitude of purpose,—a gentleman in whom one might build an absolute trust. A few swift strokes portray for us an admirable character without ambition, without guile, and, it must be confessed, without much power of imagination. When Macbeth is thrown into a sudden reverie by the predictions of the three weird sisters, Banquo addresses them with perfect nonchalance:

" My noble partner
You greet with present grace and great prediction
Of noble having and of royal hope
That he seems rapt withal; to me you speak not.
If you can look into the seeds of time,
And say which grain will grow and which will not,
Speak then to me, who neither beg nor fear
Your favors nor your hate."

Again, when Rosse enters and verifies the prediction of the three sisters by saluting Macbeth as Thane of Cawdor, Banquo, after exclaiming,

“What! Can the Devil speak true?”

answers his own question and replies to the insinuation of Macbeth:

“Oftentimes to win us to our harm,
The instruments of darkness tell us truths;
Win us with honest trifles to betray us
In deepest consequence.”

Afterward, Macbeth sounds him a little nearer, desiring to ensnare him in his own projects, and hinting darkly that Banquo's concurrence will increase his honor, and Banquo replies:

“So I lose none
In seeking to augment it, but still keep
My bosom franchised and allegiance clear,
I shall be counselled.”

That utterance was Banquo's death-warrant; but even if he had known the consequences, we feel that he would have given the same response.

Then follows the murder of Duncan,—that utmost limit of tragic power—and in the overwhelming horror that ensues, Banquo alone retains his sanity. Erect and unshaken in the midst of the confusion of terror that has submerged all of his companions, he advises a conference and inquiry into the murder of the king.

“Let us meet
And question this most bloody piece of work
To know it further—”

and he adds, with a deep solemnity that sums up all the horrible mystery of the murder:

“Fears and scruples shake us.
In the great hand of God I stand, and thence
Against the undivulg'd pretence I fight
Of treasonous malice.”

In these four brief utterances of Banquo, we learn all that is essential to a complete knowledge of his character. Macbeth himself gives exactly our estimate of Banquo, in the soliloquy which anticipates the entrance of the murderers:

“Our fears in Banquo
Stick deep, and in his royalty of nature
Reigns that which would be feared. 'Tis much he dares,
And to that dauntless temper of his mind,
He hath a wisdom that doth guide his valor
To act in safety. There is none but he
Whose being I do fear; and under him
My Genius is rebuked, as it is said
Mark Antony's was by Cæsar.”

It is of *Macbeth* that Dr. Johnson, after praising the solemnity, grandeur, and variety of its action, remarked, “but it has no nice discrimination of character.” The Doctor was constitutionally incapable of understanding that common-sense is not the measurer of genius. No one was better fitted than he to disentangle verbal intricacies; no one could expound more clearly the meaning of an involved construction. His clear mind, his exact touch, his correct judgment, illuminated every subject that fell within the scope of his limitations. His courage was shown by his defense of Shakspere in disregarding the unities of time and place,

but the ecstasy of love, the fury of jealousy, the insanity of rage, which oppress us feeble mortals into silence, and to which Shakspere alone has given a distinct and adequate utterance, lay beyond the range of Johnson's wisdom and beyond the reach of his imagination. He was the first of the commentators to explain the character of Polonius, as dotage encroaching upon wisdom, but the headlong Romeo offended his sense of propriety. He considered the tragedies to be labored, that Shakspere's "performance seems constantly to be worse as his labor is more," and that "his declamations or set speeches are commonly cold and weak"; all of which throw a flood of light upon Johnson, without at all obscuring the merit of Shakspere.

Few diversions can afford greater pleasure than the cursory examination of the various readings of Shakspere's text, the explanation of corrupted passages by different commentators, and the emendations that have been proposed to clarify obscure portions of the text. The range of ingenuity that is thus manifested, affords extremely entertaining food for contemplation, though the profit seems often out of all proportion to the labor that has been expended, and where many conjectures manifest more intrepidity than insight. In *Othello*, Iago says:

"Oh, beware, my lord, of jealousy.
It is the green-eyed monster, which doth mock
The meat it feeds on."

This simple passage, where "the meat it feeds on" is manifestly the man who cherishes it, has been hacked and heckled by many commentators. Andrew Becket remarks:

I substitute *muck*, i.e. *bedaub*, or *make foul*; and this is the true character of jealousy. For “the green-eyed monster,” I read “the *agreinied*, i.e. *sportive, monster*,” with a mixture of pleasure or satisfaction in what it is engaged in; in which sense the word is used by our earlier writers. The lines thus altered will be highly descriptive of jealousy.

“It is the agreinied monster, that doth muck
The meat it feeds on.”

Zachary Jackson, on the same passage, says:

It may seem strange to my readers that a small domestic animal may have been the mighty *green-eyed monster* to which our ingenious bard alludes,—I mean the *mouse*. Indeed, familiarly, it is called a *little monster*, but its eyes are not to say *green*. However, a white mouse in Shakspere’s time would have been a very great curiosity, and if one had been produced with green eyes, it would have equally attracted the notice of the naturalist, etc.

And between A. Becket and Z. Jackson there is a whole alphabet of amusing scholiasts whose fantastic conjectures are admirably suited to beguile the tedium of a rainy evening. Coleridge may have had these very gentlemen in mind when he said, “If all that has been written by Englishmen upon Shakspere were burned, in the want of candles, merely to enable us to read one half of what our dramatist produced, we should be gainers.” Still, it would be a misfortune to lose Becket and Jackson, for while they throw but a dark kind of light on *Othello*, yet they have a merit of their own, and upon the background of Shakspere’s characters, which they have obscured, appears plainly the picture of their own miraculous stupidity. Jackson

certainly deserves to live, if only in the pillory, for styling Shakspere, "Our ingenious Bard." Mr. Coleridge's wish came too late. The critics, besides owing a general resemblance to Sir Oliver Mar-test, are also like him not to be flouted out of their calling.

The very worst suggestion that I remember to have seen was made by Bishop Badham on a passage in *Hamlet*. The Prince is explaining to Horatio and Marcellus one of the drinking customs in Denmark:

"The king doth wake to-night and takes his rouse,
Keeps wassail and the swaggering upspring reels."

The passage is clear enough as it is, though Pope proposed to read upstart for *upspring*, imagining that the upspring was the king. The subject of the verb *reels* is, however, the same as that of *takes* and *keeps*, and the construction is perfectly regular, the last four words meaning that the king dances the swaggering upspring, or staggers through the clumsy Dutch dance called by name the "upspring." There is here nothing obscure or conjectural, the upspring being also alluded to by Chapman, Shakspere's great contemporary. Now, then, after everything is comfortably settled, along comes Bishop Badham, proposing to read:

"Keeps wassail, and the swaggering upsy-freeze,"

in support of which suggestion he says, flippantly, "not that I know what *upsy-freeze* is, or whence it is derived," but he is sure, or says he is, that *that* is what Shakspere wrote. The Bishop knew perfectly well what upsy-freeze meant, for Massinger had used *upsy-freezy*, meaning "tipsy" in the *Virgin Martyr*; Jonson

used *upsee-Dutch* in the *Alchemist*, and Fletcher had used *upsy-English* in the *Beggars' Bush*. Scott uses a variation of the words in the Soldier's Song in *The Lady of the Lake*, while in *Kenilworth*, honest Mike Lambourne proposes a toast, "Here goes it, up sey es!—to Varney and Leicester."

Yet all this has nothing, or very little, to do with Shakspere and it is hardly worth the pains to search for a meaning to put to Bishop Badham. Indeed, the Church has not been always happy in its representatives on the "Commission of Commentators." Everybody knows how Bishop Warburton's perversity tried the patience of Coleridge, and the Reverend John Hunter exhibits a sustained monotony of intellectual mediocrity that seems almost beyond human hope to emulate.

But if Badham's conjecture is an example of the worst possible of all textual variants, Theobald proposed some changes that have procured him the everlasting gratitude of all readers of Shakspere. Theobald was one of the contemporary men of letters whom Pope inundated with the multitudinous malignity of his soul, and the occasion of this hatred was precisely the matter that I am at this moment considering. Pope had published his edition of Shakspere in 1721, in six volumes, by subscription, at a guinea the volume. His name sold several hundred sets of the work before it came out, but when it began to be examined, the sales waned, even though the price was reduced. Pope had always felt that he incurred a disparagement in editing the irregular plays of a poet who was so greatly his inferior, and his vanity was dreadfully outraged in learning that Shakspere seemed to have claims of his own to public favor which were beyond the power of

Pope's reluctant patronage to influence. The fact is susceptible of ample proof that Pope never forgot an injury to his self-esteem, and the sting was yet rankling in his soul when, in 1726, Theobald published some comments of his own. The full title of this little work was itself not free from malice and, even without its antecedents, was easily calculated to disturb the very unstable equilibrium of Mr. Pope. It was this:

Shakspere Restored | or a | specimen | of the | Many Errors |
as well | Committed as Unamended by Mr. Pope | in his late
Edition of the Poet | designed not only to correct the said
edition, but to restore the true reading of Shakspere in all
the editions ever yet published | by Mr. Theobald.

¹ “Laniatum corpore toto
Deiphobum vidi et lacerum crudeliter ora,
Ora manusque ambas.” | London | MDCCXXVI.”

Nothing surely could be intended save insult in a title like that, that roars so loud and thunders in the index. Even if Theobald failed to make good his boast, the insult would remain; but Theobald did not fail, and the insolent victory of his success was bitterly galling to Mr. Pope, who forthwith booked his enemy for a prominent place in the *Dunciad*. In spite of the bad taste of the title-page, the felicity of some of Theobald's conjectures is admirable, one of them, in *Henry V.*, is perhaps the most brilliant restoration ever made in any modern text. Dame Quickly is describing the death of Sir John Falstaff. The whole passage is so fine that it would bear quoting for itself, but it is necessary here to show the magnificent achievement of Theobald. The quarto says:

¹ “I saw Deiphobus, his body mangled with wounds and his face cruelly disfigured, his face and both his hands.”

'A made a finer end, and went away an it had been any christom child; a 'parted even just between twelve and one, even at the turning o' the tide: for after I saw him fumble with the sheets, and play with flowers, and smile upon his fingers' end, I knew there was but one way; for his nose was as sharp as a pen, on a table of green fields.

This paragraph Rowe had passed over in silence, but Pope stopped and tried to explain it. One of the axioms of common-sense should have suggested to Pope that discretion forbids the attempt to explain what one does not himself understand. In an earlier play, there is a scene where Pistol enters the apartment where Falstaff and Doll Tearsheet are taking supper together, and raises a disturbance that transcends the limit of noise permitted even in the easy-going establishment of Mistress Quickly. Sir John reproves him gently, saying, "Pistol, I would be quiet," to which Pistol responds, "Sweet knight, I kiss thy neif." "This word, neif," says Pope, "is from *nativa*—that is, a woman slave born in one's house." It is true that when Falstaff's page, once on a time, spoke of Doll Tearsheet as being a kinswoman of his master's, Prince Harry answered with the unwholesome rejoinder that, if a kinswoman at all, she must bear to him something of the same relation that the parish heifer sustains to the town-bull, but even that would fail to indicate that she was a slave born in the Falstaff mansion. The children in the London streets might have informed Mr. Pope that neif is simply another name for fist. Bottom, in offering to shake hands with Mounsieur Mustard-seed, asks him to give him his neif. In the narrative of Falstaff's death, also, Mr. Pope proceeded to explain what he did not comprehend. These last words, he

said, "have crept into the text from the stage directions. A table was here directed to be brought in. Greenfield was the name of the property man in that time who furnished implements for the actors. 'A table of Greenfield's.'" Everyone knew that the original reading, that of the quarto, was wrong; the 1632 folio had been changed to read, "a table of green frieze," but Theobald amended the words so happily that one demands no other proof of their correctness than their inherent fitness. He read, "for his nose was as sharp as a pen, an' 'a babbled of green fields." That was Theobald's greatest achievement, but it is also the highest triumph of Shaksperean conjecture. It is more than a conjecture, it is a restitution. Dr. Bucknill, in his *Medical Knowledge of Shakspere*, says excellently of Falstaff's death:

What a fine touch of nature there is in the old knight "babbling o' green fields" in his last delirium! The impressions of early years, of innocent happiness, flitting through his mind; the last of life's memories fading into the first, as if the twilight of eve were to touch that of morning.

In the same year, 1768, when Johnson published his edition of Shakspere, Lessing was writing his *Dramaturgie*, which gave to Shaksperean criticism in Germany, an impulse that still shows little indication of abatement. Goethe was then in his twentieth year, and was studying law and literature in Leipzic. In that year Chateaubriand and Napoleon were born, and the Reverend Laurence Sterne died. Nothing is more interesting than the study of the works that have issued from the German school of Shaksperean criticism from the time of Lessing, Lenz, and Herder.

to that of Ulrici, and there is one remark of Lessing's that has often come to my mind when I have considered the ascription of Shakspere's plays to Bacon or Marlowe or the Earl of Rutland or Barnefield. In No. 73, Lessing remarks, in speaking of Weiss's tragedy of Richard III., "What has been said of Homer, that it would be easier to rob Hercules of his club than him of a verse, can be as truly said of Shakspere." How hopeless, then, would seem the task of depriving him of all his dramas! And yet there is a very reasonable uncertainty what verses or what scenes are really his. Some of the plays even that bear his name are of disputed authenticity and bear a doubtful impress of Shakspere's mind. One cannot withstand the conviction that if we could separate the work of Shakspere from that of his co-laborers, we should have the material for a perfect psychology. The converse has now become more probable: that the perfection of psychology may enable us to ascertain what of the work that we to-day regard as that of Shakspere is authentically his. For there will doubtless sometime arise a system of applied psychology that will devote its hours of play to the elucidation of just such questions as this. Doubtless, too, Shelley felt an intuitive premonition of such a psychological development when he wrote:

"I am as a spirit who has dwelt
Within his heart of hearts, and I have felt
His feelings and have thought his thoughts, and known
The inmost converse of his soul, the tone
Unheard save in the silence of his blood,
When all the pulses in their multitude
Mirror the trembling calm of summer seas.
I have unlocked the golden memories

Of his deep soul, as with a master-key,
And loosened them and bathed myself therein,
Even as an eagle in a thunder mist,
Clothing his wings with lightning."

For Shelley's thought holds a larger intimation than its actual utterance expresses. It contains, if not the recognition, at least the apprehension, of a psychical problem that cloaks the very heart of genius and that has been obscurely felt on many occasions and for many centuries by other poets.

Whither the study of what we call the subconscious mind will eventually lead us, no one may at present affirm with any confidence of probability. With some of its endowments we are gradually becoming familiar through the work of those gentlemen who have devoted their lives to the study of its phenomena. They have enlightened us to an extent that renders our desire for further knowledge a very imperative one. We have been informed that the subconscious mind is the domain of habit, that it directs those functions that are essential to life, that it wields the *vis medicatrix naturæ*, and that it retains indelibly every impression that it receives, but they have not yet told us how we may attain control of its processes, nor have they yet formulated the laws that will guide us even in the examination of such a question as is here presented to us. Moreover, they must not forget that all instruments are necessarily imperfect and that all media distort more or less the truths that they transmit. The nature and extent of these variations must also be calculated. Perhaps of all recorded men, Aristotle, Shakspere, and Franklin will seem to require the fewest corrections for deviation.

At present we may well hesitate to pronounce condemnation on even *Titus Andronicus* and *Pericles* (*Pyrocles*), when we recall that Pope entertained a doubt as to the genuineness of *The Winter's Tale*. To be sure, Heminge and Condell omitted both *Pericles* and *Troilus and Cressida* from the 1623 folio, but, as Ulrici remarks: "The omission of a play from the first folio is no proof of its spuriousness, nor does it follow, as most critics think, that the admission of a play into the first folio is an adequate guarantee of its genuineness." *Quis custodiet custodes?* who will assure us that the editors of the 1623 folio may not have had occasional delirations like those of Badham, of Becket, and of Jackson?

IV

ON THE SYMBOLISM OF NAMES

"What variety of herbs soever are put together in the dish, yet the whole is called by the one name of a salad. In like manner under the consideration of names, I will here make a salad of different articles."

MONTAIGNE: *Of Names.*

"Oh! Amos Cottle! Phœbus! What a name
To fill the speaking trump of future fame!"

LORD BYRON: *English Bards and Scotch Reviewers.*

"Budd Doble, whose catarrhal name
So fills the nasal trump of fame."

O. W. HOLMES.

"A good name is a good omen."

Roman Adage.

So far as I can discover, there is no reason in the world, nor in the canon of the Church, which would disqualify for ordination a candidate by the name of Badham. However incongruous it may seem, the name is not incompatible, I presume, with holy orders. The bishop who ordained him had perhaps no compunctions, no premonitory misgivings, as he endued him with the faculties of priesthood. The future critic lay hidden under the robe of the candidate. Nor did his name of ill-omen prevent Mr. Badham's ascent through the intermediate grades, until he himself became a hierarch of the Anglican Church, and held his episcopal staff in one hand, while with the other

he wrote comments on *Hamlet* that would have dimmed the lustre of John Dennis or Elkanah Settle.

Many years before Mr. Badham put on the amethyst ring, indeed about ten centuries before that event, and while yet the Bishop of Rome was elected by the mixed suffrage of priests and people—to be exact, in the year 844, a priest by the name of Boca de Porco was chosen to occupy the Roman See. But while the respect and admiration of his electors had willingly overlooked his unseemly and fantastic name, which, even when softened by the utmost amenity of translation, must still be rendered “Pigsmouth,” he himself deemed it fitting to assume a name more in keeping with his office and named himself Sergius. His idea was considered so felicitous that, with few exceptions, his successors have followed his initiative and have changed their names on mounting the papal throne. There even arose a tradition that any priest who should retain his original name after being elected pope, was certain to die within the year, a belief which has doubtless conspired to render the custom practically universal. Thus Adrian of Utrecht, who was elected pope by a compromise, chose to retain his own name and was known as Adrian VI., but the fatality that had been predicted befell him. A generation afterwards, when the grave and dignified cardinal, Marcello Cervini, was elected pope, he insisted, in spite of the protests and prayers of the whole College of Cardinals, on retaining his name and chose to call himself Marcellus II. Never did a pontificate promise greater benefits to the Roman See, but Marcellus died suddenly on the twenty-second day of his reign.

There seems no reason why the privilege of changing his name should be denied to anyone. A name, *nomen*,

is merely that mark by which a man is known, and Mark Twain is more accurately the name of our recently deceased humorist than Samuel Clemens. Indeed, Mark Twain was following, perhaps unconsciously, in the footsteps of many illustrious men. "One of the most amiable of the reformers was originally named Hertz Schwartz (black earth) which he elegantly turned into its Greek equivalent, Melancthon." Erasmus also took that name in preference to his original name, "Gerard," which has the meaning of "amiable." He is often called Desiderius Erasmus, but the one is the Latin and the other the Greek form of his baptismal name. A certain well-known French writer named Guez (a beggar) felt such extreme shame at so lowly a name that he assumed a more sonorous one and one more in keeping with his merit and pretensions, calling himself *Balzac*. This was the Balzac who, besides being the most eminent prose writer of his time, was one of the founders of the French Academy in 1635. Under his pseudonym he attained to a celebrity that would otherwise have been denied him. His merit was not perhaps augmented, but his fortune was improved.

It is related of Boiardo, the Italian poet, that one day, while hunting, the name "Rodomonte" occurred to him as being appropriate to a character in the poem that he was at that time engaged upon. The name seemed to him so felicitous that he at once abandoned the hunt and returned home, where he caused all the village bells to ring a joyous peal in celebration of his happy discovery. Balzac, the younger, when at a loss for a suitable name for one of his characters, was accustomed to wander over Paris, scanning the street signs in search of a name that would be fitting for his

use. Hood remarked the influence that lay in the change of names. He wrote:

“A name?—it has more than nominal worth
And belongs to good or bad luck at birth,
As dames of a certain degree know.
In spite of his page’s hat and hose,
His page’s jacket, and buttons in rows,
Bob only sounds like a page of prose
Till turned into Rupertino.”

D’Alembert, the mathematician, philosopher, academician, and encyclopedist seems to have had no family name at all, or at least to have had no right to one. Perhaps that is the reason why the *Encyclopædia Americana* does not mention him. The name which he actually bore in early life was *Le Rond*. This was no name for aspiring merit—and the man who bore it had merit. He wisely conciliated fortune by assuming the name which he has rendered famous. Casanova applauds the wisdom of the younger Arouet in changing his family name for an anagram made from it, and calling himself Voltaire (Arouet 1. j.). Indeed the “roué” implied in his family name might have proved a lion in his early path. The Italian poet, Trappassi, also is commended for assuming the name of Metastasio and averting the omen implied in his original name. Henri Beyle, under the assumed name De Stendhal, won fame which he considered hopeless under his simple patronymic. Casanova himself took the name, de Seingalt, but he would have been famous under any name.

No man ever changed his name with better reason than Paracelsus. He was called at first Bombastes, a name of execrable significance. He took that of

Paracelsus, which was more than a name,—it was a title. And yet the omen was not wholly evaded, for there was always something of pretense and bluster in him, mingled with brilliant but erratic intuitions of genius. He seemed to be alternately under the influence of the name which he had discarded and of that which he had assumed. The consequence was that he was derided by his contemporaries as a charlatan, and exalted by his successors to an unmerited eminence. He is believed to have introduced laudanum to the notice of physicians.

In reading the *Life and Opinions of Tristram Shandy*, one finds, after perusing some two hundred pages, that Tristram is not yet born. It is true that he had already had a great variety of opinions. Indeed, in his "Koran," Sterne acknowledges this curious anachronism by saying, "that alas! he knew the world too well to be in a hurry to step into it."

Walter Shandy believed "that there was a strange kind of magic bias, which good or bad names irresistibly impressed upon our characters and conduct. How many Cæsars and Pompeys, he would say, by mere inspiration of their names, have been worthy of them." The pedantic Mr. Shandy, having contented himself with the simple name of Robert for his firstborn, sought long and far for a fit name for his second. The one that he finally selected as not only in itself the most admirable, but as presaging wisdom and promising success in life, was Trismegistus. It is true that by a chain of improbable accidents the name of Trismegistus, which he admired, became changed to Tristram, which he abhorred, but then what son of Walter Shandy or, for that matter, of the Reverend Laurence Sterne himself, could be expected to sustain and justify the name

of Trismegistus? Such a title would have hung loose about him like a giant's robe upon a dwarfish thief.

That there is a "magic bias" about some names, is not lightly to be denied. The Romans readily saw omens in names. Octavius Cæsar took the name "Augustus," because it was one of good omen. Suetonius says that when Augustus was on his way to Actium, where the last die was to be thrown against Antony for the empire of the world, he met a countryman driving an ass, and when, on asking his name, the countryman replied that his name was Eutychus (good fortune), and that the name of his beast was Nikon (victory), he embarked in full assurance of success. After the battle he built a temple on the spot where he had met the auspicious pair, and erected in it a statue to the countryman and one to his ass, as if they had predicted his victory. He would more justly have consecrated also a statue to Cleopatra, who caused the prediction to be verified. A similar tale is told of Vespasian, whose ambition of empire was stimulated by the unexpected entrance of a servant named Basilides (royal), while Vespasian was alone in the temple of Serapis offering a sacrifice for the success of his own hopes. The Greeks thought to propitiate the Furies under the pleasing name of "The Well Intentioned Ones" (*Eumenides*), and since ill omens were considered to come from the left hand, they thought to avert disaster and to conciliate fortune by calling the left hand "auspicious." So the treacherous Euxine was called "favorable to strangers," and by some lingering mysticism, the small-pox is called by modern Greeks the *eulogia* or the "blessing."

Niebuhr conjectures that the name Servius (and consequently Servilius) does not denote a servile

origin, but that as Manius (from *mane*) was a name given to a child born in the morning, so Servius may have been given in early times to a child born in the evening, or at any rate late (*sero*) in the day. In like manner, Lucius seems to have been first bestowed on a child born during the sunny part (*lux*) of the day. But the legend of Servius Tullius's birth would seem to point to the more plausible derivation of the word, for it is said that a slave of Tanaquil, Tarquin's queen, when bringing some cakes as an offering to the household deity, saw the apparition of the god in the fire on the hearth. The priest bade her robe herself as a bride and shut herself up in the chapel. She did so and became with child by the god. The child was Servius Tullius, who afterward reigned.

It would be strange if the universal superstition of the ancients had neglected the consideration of the "magic bias" which Sterne says dwells in names. They took care to stop the smallest crevice and cranny through which neglect might lead ill-fortune to their discomfiture. It was important that none but men with lucky names should be first enrolled for military service, or placed in charge of any undertaking or adventure. It was without success that Atrius Umber offered himself as a candidate for office. His name was his undoing; as was that of an Austrian architect, who in vain supplicated the Emperor for reinstatement in an office from which his name, Malacarne, (tainted meat) had ousted him. Malacarne was Badham's cousin.

The City of Rome had a secret name that was never disclosed. Macrobius says: "*Romani ipsius urbis nomen Latinum ignotum esse voluerunt.*" ("The Romans determined that the Latin name of their city should

be secret.") They feared that an enemy, knowing the true name, might summon the protecting divinity to abandon the city and leave it defenseless. Niebuhr plausibly conjectures that this secret name must have been "Quirium," from which the Roman citizens were called Quirites. Romulus was worshiped under the name Quirinus, which also points to Quirium or some similar word as the mystic name of Rome.

There is a little town in Italy which, unlike Rome, seems not unwilling to have its name known to the world, since it recently mobbed the Red Cross physicians and nurses, on the plea that their purpose was to introduce the plague into Calabria. The name of this town is Verbicaro, which is as near to "The Word Made Flesh" as the most strenuous advocate of the Johannine authorship of the Fourth Gospel could wish. We Americans have nothing to offset the Calabrian "Verbicaro," and yet a close follower of the fall football games must often have wondered what would be the result of a battle between the two rival teams of the "Sacred Heart" and of the "Precious Blood." It cannot, therefore, be justly affirmed of us that we have done nothing to perpetuate sacred traditions.

Some time since, being in company with other gentlemen, there was much good sport over the names of some of the prominent Indian chiefs. Especially was the name of a Shoshone chief, named "One Toe Gone," the subject of mirth. One of those present, hearing for the first time this uncouth and peregrine name, lifted his voice in unkindly comment. "What would happen," he asked, "if some other member of the tribe should also suffer a similar loss? He could not be called 'Another Toe Gone,' because he had lost only one. Nor

could he be properly styled ‘Second Toe Gone,’ for a like reason, since he had merely lost his first.”

But the name of the Indian chief was quite the same in kind as that of Mutius, who was called Scaevola because he was left-handed; or of Appius Claudius, whose cognomen of Cæcus was given to him because he was blind¹; or of Cicero, whose ancestor had a wart on his nose; or of Cæsar, because one of his family had come into the world through an abdominal section; or of Publius Clodius, who was surnamed Pulcher because of his beauty; or of Pompey, who was called Magnus from his early successes in battle; or of Scipio, upon whom the Senate bestowed the name of Africanus for conquering Hannibal at Zama. In times of chivalry the same tendency gave rise to augmentations which were conferred by the sovereign and added to an escutcheon to signalize some especial act of heroism or devotion; or the augmentation was a recognition of descent, as when Henry VIII. honored the arms of Thomas Manners, whom he created Earl of Rutland, with an augmentation of the royal arms; or it was granted as a mere act of courtesy, as when Louis XI. of France granted to Piero de' Medici the privilege of adding the lilies of France to his coat-of-arms. The addition of Africanus to Scipio was, properly speaking, an augmentation, that of Cicero to the Tullii was a mark of family distinction, that of One Toe Gone, a name of purely personal description; but they were all instances of the imposition of an external and fortuitous name, which superseded the original vocal mark

¹ It has been assumed by historians that Appius Claudius the Censor, one of the three greatest men of affairs that Rome produced, was himself blind, whereas he had merely inherited the cognomen Cæcus from an ancestor. See Mommsen's sketch of the Claudian gens.

which had until then denoted the bearer. It would seem almost grotesque to urge the resemblance between the name of the Indian chief Little No-Good and that of the Patriarch of Constantinople, St. John Chrysostom, but they both comprise the added increment of a descriptive surname which in one case overshadowed the original name and in the other supplanted it.

I am not aware that anyone has attempted to demonstrate the converse of Solomon's proposition that there is nothing new under the sun, but it is perhaps equally true that there is nothing not-new under the sun; for if the old anticipates the new, the new just as truly perpetuates the old. That the belief in the symbolic value of names, "the magic bias," yet persists among men, is evident, among other instances, from the fact that for four hundred years the name Christian alternates with that of Frederick in the list of Danish kings, both being esteemed fortunate names. Thoresby (quoted in Southey's *Commonplace Book*) noted the retention in Yorkshire until nearly the eighteenth century

of the ancient British way of using the father's and grandfather's Christian name instead of a family name. Some of them were possessed of large estates which had descended for many generations from father to son, and yet the son of Peter Williamson, for example, was named William Peterson and his son in turn was called Peter Williamson until finally the name of Peters was adopted for a family name and thereafter remained in use.

Richardson created a character which satisfied his ideal of an irreproachable gentleman, and he gave him a name which he thought symbolized his absolute perfection, Sir Charles Grandison. He considered

this the only faultless name that ever passed human lips. By repeating it he overcame sleeplessness, he calmed his wrath, he satisfied his hunger, he made life joyous. Indeed, the "magic bias" of this name, Sir Charles Grandison, must have been greater than that of any word revealed to Vergilius or to Hermes Trismegistus, since in its strength Richardson continued to write letters a long time after he had deceased; for even forty-five years after that event, which is usually final with other people, six volumes of his *Letters* were published by Phillips of London. Something of Sir Charles Grandison must have appeared in the Marquis of Lafayette to whom the name "Grandison-Cromwell" was added by a French wit, though a better name was given to Lafayette by another admirer,—a name which is worth a whole biography, "Scipio Americanus."

Some names seem merely fantastic. Don Alvar Nuñez Cabeza de Vaca (cow's head) was Governor of Paraguay during the middle of the sixteenth century. The name was an old and honorable one; for there was a knight named Don Nuño Cabeza de Vaca, a nephew of Don Arias Gonzalo, who was in Zamora when Don Diego Ordóñez de Lara impeached that city for harboring the assassin of Don Sancho in 1067. Whatever may have been the bucolic origin of Cabeza de Vaca, there is certainly something almost penal about the name of the Nicaraguan Ambassador, Dr. Paniagua (Bread and Water). Still his ancestor may have won his name, not by being a prisoner himself, but by making others prisoners and condemning them to this meager fare. So much more honorable in the sight of the world is it to commit injustice than to suffer it!

A member of the present College of Cardinals bears

the name of Vives y Tuto, which may be nearly equivalent to "Alive and Well," or "Safe and Sound." It should bear the cardinal whom it designates to a wholesome and serene old age. Pérez-Galdos has a name in his *Grande Oriente* which I have not met elsewhere, Sanahuja (Holy Needle). This would be more appropriate among the College of Cardinals than in the sanguinary civil wars that were waged in Spain during the second decade of the last century. But Sanahuja had nothing to fear. His name, it need hardly be said, was a bulwark. No bullet could hit him, no ambuscade capture him. Though a host had encamped against him, he must have escaped without scathe. His name promised him protection and kept the promise. Concealment, which is also escape, was guaranteed to him. He had no need of fortifications. A mere bottle of hay was a better protection for him than moats, castlerwalls, and body-armor for others.

Everyone has admired the verses in which Mrs. Barbauld apostrophized "Life":

"Then steal away, give little warning,
Choose thine own time;
Say not Good-night, but in some brighter clime
Bid me Good-morning."

Coleridge was wont to insist playfully that the name of the author involved an impropriety. He affirmed that her name was "a pleonasm of nakedness."

In the *Vie de Jeanne d'Arc*, Anatole France mentions a herald in the service of Richard de Bretagne, Comte d'Etampes, whose name was "Comment Qu 'Il Soit" (However It May Be). Quoi-Qu' On-Dit, or Comme-Il-Faut, also, in the days when a herald was almost an

ambassador, would have pointed out their owners as worthy of diplomatic missions.

Quevedo, in his *Buscon*, tells a good story that I have never seen translated. Pablos was playing with his schoolmates in the street one day, when Pontius Aguirre, a member of the council, passed by. One of the boys said to Pablos, "Call him Pontius Pilate and run." So Pablos sang out, "Pontius Pilate! Pontius Pilate!" and started to run, while the councilor set out in pursuit of him with drawn sword. Though the child ran as fast as he could, still he felt that his pursuer was overtaking him. Suddenly, however, the schoolhouse came in view, and Pablos, ready to fall for terror, darted into the schoolroom with Pontius Aguirre at his heels. Here the schoolmaster interposed, and protected Pablos from the furious councilor, who finally departed with the schoolmaster's assurance that he would punish the lad so severely that he would never again neglect the respect due to so distinguished a gentleman. Punctually was the promise fulfilled. Pablos was stripped and lashed without mercy, the master asking at each stroke, "Now will you say Pontius Pilate again? Now let me hear you say Pontius Pilate." The next morning it was Pablos's turn to stand up before all the school and recite the Apostles' Creed. It was not until after he had said "Born of the Virgin Mary," that he began to falter. He knew what was coming, but so terrified was he at the recollection of the preceding day, that he stammered out "suffered under Pontius Aguirre," and sat down, unable to add another word.

There are doubtless to be found traitors to the "magic bias," but what unaccountable perversity of propriety, what strange fatuity of inverted fitness,

could induce a man named Dr. Hyacinth Ringrose to write a book on *Divorce*? Not divorce but marriage is the proper topic for any man who is so called. Marriage, love, and paradise are the only themes that he may fitly expound. Such a name, redolent of tranquil joys, a surfeit of honey and kisses, puts a man under triple and compulsive bonds to speak only of wedded bliss. He should not even recognize the existence of such a thing as divorce. In the bright lexicon of Dr. Hyacinth Ringrose, there should be no such word as divorce. A book that anyone else might have written without discredit, becomes in his name a horrid blasphemy. He insults his origin, he defames his penates, he adjures his birthright, he defies his guardian angel. It is no palliation to urge that he perhaps failed to perceive the silken obligations that he so ruthlessly broke and trampled upon.

Dr. Hyacinth Ringrose may be regarded as the master of his own fate, but what miscreant irony imposed upon our countryman the sanguinary and strategic title of "General," which, like a splash of blood upon a cherub's face, disfigures the mellisonant name of Felix Agnus (Happy Lamb)? Proud we may well be of our own General Felix Agnus, and yet our pride should not become intemperate, for after all he is a mere plagiarism, an echo, a literal translation of the great Don Benigno Cordero, who led the militia of Madrid to a doubtful victory at Boteros. A friend of Benigno Cordero, and the agent in Madrid for certain ecclesiastical foundations in Spain, was named Don Felicisimo Carnicero (Very-Prosperous Butcher). In 1849, a splendid court of the very highest nobility was manufactured overnight in Hayti, out of the raw material native to the island. These proud grandes were invited to select

their own titles, and the morning's sun arose upon an array of haughty and dusky dukes whose numbers would shame Austria. Eminent above them all towered the sublime form of the Duke of Lemonade.

The story is told of an English judge with a great reputation as a wit who was conducting a certain case where the accused was charged with murder.

"What is your name?" thundered the judge.

"Fillman," he replied.

"Fillman! Fillman!" the judge roared. "Take away the F and you become Illman. Add a K and you become Killman. Take him away! His very name hath hanged him."

This manner of reaching an equitable verdict was much admired by gentlemen of the legal profession, one of whom made use of it a few days later in the case of a prisoner charged with theft, which at that time was also a capital offense.

"What is your name?" he asked, imitating the manner as well as the method of his exemplar.

"Jones," replied the prisoner.

"Jones! Jones!" the judge rejoined, violently. "Take away the J and you become Illman. Add a K and you become Killman. Take him away and hang him!"—and hanged he was. It is only just to add that these two cases, or this case and a half, are not considered to-day to constitute a valid precedent. There has arisen in the judicial mind an uneasy suspicion that the second judge impaired the value of his decision by something that resembled a flaw in his reasoning.

That is not a very good story, I confess. Still it illustrates the way in which a man's name may be perverted into an argument against him, as Cicero

showed in his speeches against Verres. In fact, orators have often availed themselves of such specious methods. Archbishop Trench tells how St. Jerome, by the use of a similar expedient, obtained a plausible victory over his antagonist, Vigilantius, on the question of introducing some new vigils into the ceremonial of the Church. This question may seem to modern readers a trivial matter, but the Church had so nearly escaped shipwreck a century earlier over the introduction of an iota into the Nicene Creed, that we cannot perhaps duly appraise its value. Anyhow, the subject was considered, and Vigilantius, in spite of his name, opposed vehemently any increase in the number of vigils in the Church ritual; whereupon St. Jerome at once proclaimed him a traitor, not only to his name but to the Church herself, and insisted that he, the enemy of vigils, should have been named not Vigilantius, but rather "Dormitantius," the "sleeper"; and this argument gave him the victory. It is easy to find fault with this story, as well, but one must not expect too much of an archbishop.

Nowhere is the symbolism of names so strikingly cultivated as in the invocation of the saints. Bayle (in his *Pensées sur la Comète*) says: "No one can doubt that the reason why women who have some trouble with their breasts have placed themselves under the protection of Saint Mammard, is because of his name. No one can doubt that for the same reason glass-blowers and lantern-makers have chosen St. Claire for their patron." In his *Vie de Jeanne d'Arc*, already quoted, Anatole France adds some instances of the same superstition. "Monsieur Saint Marcoul was thought to have especial power to heal the scrofulous (*qui portaient des marques au cou*) who bore scars

on the neck; Saint Claire to restore vision to the blind, and Saint Fort to strengthen weak infants." Scrofula was then called "Mal Saint Marcoul," as in England it was known as "King's Evil." Saint Genou was invoked by those who had gout in the knee.

The astounding legend of the eleven thousand virgin martyrs of Cologne fills several pages of the *Legenda Aurea* of Jacobus de Voragine. No paraphrase can do justice to the quaint simplicity and archaic grace of the monkish narrative. These tales were Englished by William Caxton and, under the subtitle *Lives of the Saints*, were printed by him in 1483. Some of them are very beautiful and full of simple and admirable devotion. The tale of St. Ursula is given as follows:

The passion of eleven thousand virgins was hallowed in this manner. In Britain was a Christian King named Notus or Maurus, which engendered a daughter named Ursula. This daughter shone full of marvelous honesty, wisdom, and beauty, and her fame and renommee was borne all about. And the King of England which was then right mighty, and subdued many nations to his empire, heard the renommee of her and said that he would be well happy if this virgin might be coupled to his son by marriage. And the young man had great desire and will to have her. And there was a solemn embassy to the father of Ursula, and promised great promises and said many fair words for to have her; and also made many menaces if they returned vainly to their lord. And then the King of Britain began to be much anxious, because that she that was ennobled in the faith of Jesu Christ should be wedded to him that adored idols, because that he wist well she would not consent in no manner, and also because he doubted much the cruelty of the king. And she, that was divinely inspired, did so much to her father that she consented to the marriage by

such a condition, that for to solace her, he should send to her father ten virgins, and to herself, and to those ten other virgins, he should send to each a thousand virgins, and should give to her space of three years for to dedicate her virginity, and the young man should be baptized in the faith sufficiently, so that by wise counsel and by virtue of the condition made, he should withdraw from her his courage. But this youngling received this condition gladly, and hasted his father and was baptized and commanded all that Ursula had required should be done.

Then virgins came from all parts, and many bishops came for to go with them in their pilgrimage, among whom was Pantulus, Bishop of Basle, which went with them to Rome and returned from thence with them and received martyrdom. Saint Gerasine, Queen of Sicily, which had made of her husband that was a cruel tyrant a meek lamb, and was sister of Maurice the bishop, and of Daria, mother of Saint Ursula, to whom the father of Saint Ursula had signified by secret letters. She, by the inspiration of God, put herself in the way with her four daughters, Babilla, Juliana, Victoria, and Aurea, and her little son Adrian, and left all in the hands of his own son and came into Britain and sailed over sea into England.

And when Ursula had converted all these virgins unto the faith of Christ, they went all to the sea and in the space of a day they sailed over the sea, having so good wind that they arrived at a port of Gaul named Tielle, and from thence came to Cologne, where an angel of our Lord appeared to Ursula, and told her that they should return again, the whole number to that place and there receive the crown of martyrdom. And from thence, by the monition of the angel, they went toward Rome. And when they came to Basle they left there their ships and went to Rome afoot. At the coming of whom the pope Ciriacus was much glad, because he was born in Britain and had many cousins among them, and he with his clerks received them with all honor. And that same night it

was showed to the pope that he should receive with them the crown of martyrdom, which thing he hid in himself and baptized many of them that were not then baptized. And when he saw time convenient, when he had governed the church one year and eleven weeks, and was the nineteenth pope after Peter, he purposed tofore all the people and showed to them his purpose and resigned his office and his dignity. But all men gainsaid it, and especially the cardinals, which supposed that he trespassed, leaving the glory of the papacy and would go after these foolish virgins, but he would not agree to abide, but ordained an holy man to occupy in his place, which was named Ametus. And because he left the see apostolic against the will of the clergy, the clerks put out his name of the catalogue of popes. And the blessed Ciriacus issued out of the city of Rome with this blessed company of virgins, and Vincent, priest cardinal, and Jacobus that was come from Britain into Antioch, and had held there seven years the dignity of the bishop, which then had visited the pope, and was gone out of his city and held company with these virgins, when he heard of their coming and suffered martyrdom with them. And Maurice, Bishop of Levicana, the city, uncle of Babilla and Juliana, and Follarius, Bishop of Lucca, with Sulpicius, Bishop of Ravenna, which then were come to Rome, put them in the company of these virgins.

And then all these virgins came with the bishops to Cologne, and found that it was besieged with the Huns. And when the Huns saw them they began to run upon them with a great cry, and araged like wolves on sheep, and slew all this great multitude. And as I have been informed in Cologne that there were men besides women that thilke time suffered martyrdom fifteen thousand. So the number of this holy multitude, as of the holy virgins and men, were twenty-six thousand, to whom let us pray to our Lord that he have mercy on us.

It was a pity that Father Sirmond should have thought it expedient to destroy this whole beautiful

edifice, but he contended that the eleven thousand virgins, to say nothing of their fifteen thousand companions in martyrdom, were all created out of a blunder arising from the name of Ursula's single companion. Her name was Undecimilla, and the author of this tale read it "Undecim Millia," thus expanding Ursula and Undecimilla into Ursula and the Eleven Thousand Virgin Martyrs. When Falstaff made eleven men in buckram grow out of two, he had chapter and verse for it, but here is a greater than Falstaff, who has made eleven thousand virgins grow out of two, and has thrown in, as a make-weight, a pope, many bishops, and others to the number of fifteen thousand, with an exuberant wealth of incident, much of which I have omitted, and a minute particularity of detail, that place him in a very high rank among the writers of religious romance.

Still there may have been a Saint Ursula and she may even have passed through martyrdom in some such way as is here narrated. But what shall we say of Saint Kyrie Eleison and of Saint Paralipomenon whom Peter Motteux, in his preface to Rabelais, declares to have been regarded and invoked as saints in previous times? In the Bollandist collection of *Acta Sanctorum*, Bacchus is named among the saints, while Mercury, the god of thieves, has the double honor of being enrolled under both his Roman and his Greek name. Virgil and Plutarch are also included, though Catullus and Apuleius are very properly omitted from the number.

D'Israeli records an interesting mistake. He says:

Mabillon has preserved a curious blunder of some pious Spaniards, who applied to the Pope to consecrate a day in honor of Saint Viar. His Holiness in the voluminous cata-

logue of saints, was ignorant of this one. The only proof brought forward for his existence was this inscription:

S VIAR.

An antiquary, however, prevented one more festival in the Catholic calendar, by convincing them that these letters were only the remains of an inscription for an ancient surveyor of the roads; and he expanded the inscription thus:

PRÆFECTU S VIAR UM

When Aaron Burr was on trial in Richmond on a charge of treason against the Government of the United States, it was thought remarkable that so excellent a student of history should have expected success in the establishment of a Southwestern Empire, since he must have known that no man named Aaron had ever yet mounted a throne. If Burr's mind had been free to think of such trifles at such a time, he might have effectually silenced his critics with the statement, that there had been an Aaron who had long since made his name renowned as the most famous of the Abbaside Caliphs of Bagdad, Aaron the Just (Harun Er Reshid).

Still there are certain names that seem to bear in themselves good or ill fortune to kings. In the family of Julius Cæsar the name Caius predestined its bearers to a violent death. The Roman emperors inherited the ill omen of the name and suffered the destiny it brought them. Caligula (Caius Cæsar), having in his turn been murdered, as was fated to him, in the year 41, the name disappears from the records of the Empire for nearly two hundred years—that is, until Caius Julius Verus Maximinus seized the imperial authority. But the fatality was yet potent, for after

three years of rule he was in his turn murdered by his own soldiers. In the history of England, John is a name of ill omen. The contempt that the brother of Richard, the Lion-hearted, encountered and deserved, has thrown an opprobrium on the name he bore. In France, the same name was for similar reasons considered inauspicious. The fear was so strong that when Robert II. of Scotland, the grandson of Robert Bruce, died, his eldest son changed his baptismal name of John to Robert. Doubtless the career of John Baliol had emphasized the unhappy augury by a recent and intimate example. The omen was not thereby averted, to be sure, for he could not have been much more unfortunate under his earlier name than under that which he assumed, but that only proves that the name was not the only cause of misfortune.

On the other hand, by the prescriptions of onomatomancy, Robert should have been a fortunate name in Scotland. So Louis was formerly regarded as a name of good omen for the kings of France. The omen failed with Louis XVI.—the luck had run out, and Louis XVIII. (for Louis XVII. never ruled) failed to renew it. Ferdinand and Alfonso have been always regarded as names of good omen in Spain. Pedro had an excellent vogue in Aragon before the union of the crowns. Pedro II. of Aragon is said to have been the best king that ever wore a crown. None of the popes has ever ventured to assume the name of Peter. This is, of course, due to modesty and not to any fear of ill omen. Sergius III. was named Peter before his election, but changed it on mounting the papal throne. So did Giovanni Pietro Caraffa, who took the name Paul IV. So did Pietro Ottoboni, who called himself Alexander VIII. Of Sergius III., a friend tells me that

Baronius says that a feeling of reverence for the name of Peter impelled him to change his name.¹

The name of John was for many centuries a favorite among the popes, more of them having reigned under this name than under any other, but John XXII. and John XXIII. covered themselves with such unspeakable infamy that no one has ventured to revive this name since Martin V. (Colonna) ascended the papal throne in 1417. It is doubtless in humble imitation of this papal custom that nuns assume new names when they are professed. Much harmless mirth has arisen over the uncouth names assumed or bestowed by the Independents of the seventeenth century, among whom Praise-God Barebone became eminent as much for his personal merit as for the quaintness of his name; but Moratin, in his *El Si de las Niñas*, mentions a teaching Sister in a Spanish convent who, on taking her final vows, chose to be called Mother Circumcision, and Perez-Galdoz, in a quasi-historical work entitled *Episodios Nacionales*, has likewise introduced a Sister Circumcision who had a good deal of political influence in Madrid during the troubled years of the early Carlist intrigues.

The corruption that names undergo is a theme in itself worthy alike of development and of regret. How has the sonorous and magnificent Tagliaferro become clipped and vulgarized into plain Tolliver? Theodore too, another splendid name, become curtailed into Tydder in Wales during the Middle Ages, and being

¹ ("Cum enim ille Petrus vocaretur, indignum putavit eodem se vocari nomine, quo Christus primum ejus Sedis Pontificem, principem Apostolorum ex Simone Petrum nominaverat.") ("For though his name was Peter, he thought himself unworthy of being called by the name which Christ had given to Simon when he named him Prince of the apostles and first High Priest of the See of Rome.")

afterward by progressive degeneration reduced to Tudor, finally ascended the English throne in the person of Henry VII. For this I can cite no less an authority than Camden himself, Clarenceux king-of-arms to Henry's granddaughter Elizabeth.

But what shameless liberties do we daily take with the illustrious names of the Romans! Our ancestors always spoke of Marcus Tullius Cicero as Tully. We have ventured to clip Horatius to Horace, Ovidius to Ovid, Livius to Livy, Sallustius to Sallust, and Marcus Antonius to Mark Antony. The French are even worse offenders. Dr. Arbuthnot tells of a French wit who, in looking over an Englishman's library, saw the works of Cicero. "Ah!" he exclaimed. "*Ce cher Ciceron! Je le connois bien. C'est le même que Marc Tulle.*" They degrade Titus Livius to Tite Live, and have even ventured to lay violent hands upon the Greek names which we have respected, and Achilles becomes Achille, and Pythagoras, Pythagore. Among the ancients themselves the opposite course was taken. Diocles amplified his name into Dioclesianus, and Disraeli cites Lucian to the effect that a man named Simon, coming into great wealth, enlarged his name with his fortune, and called himself Simonides.

Superstition is the child of uncertainty and want of reflection, and so long as life presents to us unreflecting mortals so large a range of uncertainties, superstition will continue to constitute an important factor in our moods and prejudices. But among those who follow the precarious calling of sailors, these two elements of uncertainty and irreflection are very prominent. The superstitions of sailors are numerous, minute, and potent. One does not need to bunk in

the forecastle to become acquainted with them. They invade the quarterdeck, sleep aft, and eat at the captain's table. They never die and rarely fall overboard. Each generation of sailors transmits them in all the fullness of detail to its successors. Some thus run back many centuries. Merely to enumerate them would require much time. Some are famous, and one of them has been the occasion of a splendid effort of genius in the hands of Coleridge. Among these multitudinous omens of good or ill, the portentous significance of names has not been overlooked by sailors, whose preferences and aversions will often be found to be directed by the good or bad luck implied in a vessel's name.

Boswell, having patronized the Corsicans in their revolt against Genoa, wrote, in 1768, an *Account of Corsica*, and furthermore bothered Dr. Johnson's life out of him by incessant diatribes against Genoa. Johnson wrote him a kind letter in which he said:

"I write to tell you that I shall be glad to see you and that I wish that you would empty your head of Corsica, which I think has filled it rather too long."

Boswell is careful to reproduce his reply to the Doctor:

How can you bid me empty my head of Corsica? My noble-minded friend, do you not feel for an oppressed nation bravely struggling to be free? Consider fairly what is the case. The Corsicans never received any kindness from the Genoese. They never agreed to be subject to them. They owe them nothing, and when reduced to an abject state of slavery, by force, shall they not rise in the great cause of liberty and break the galling yoke? And shall not every liberal soul be warm for them? Empty my heart of Corsica! Empty it of honor, empty it of humanity, empty it

of friendship, empty it of piety! No! While I live, Corsica, and the cause of the brave islanders, shall ever employ much of my attention, shall ever interest me in the sincerest manner.

JAMES BOSWELL.

Although this letter is worthy to be preserved and kept on perpetual record as an illustration of bathos and the mock heroic, yet a different motive impels me to take present notice of it, for in the following year at the great Shaksperean jubilee in Stratford, Boswell made himself conspicuous by wearing in large letters round his hat the name—"Corsica—Boswell."

All translations are conceded to be necessarily inadequate. They fail to convey the exact meaning, color, and associations which cluster about them, like clients and friends, in their own language. A book translated becomes a book expatriated. It may make new friends, it has certainly lost the old ones. When Congreve's play, *The Mourning Bride*, was translated into French under the title *L'Epouse du Matin*, it acquired a flavor quite distinct from the original. So Cibber's play, *Love's Last Shift*, no longer seemed exactly the same when it was rendered into French as *La Dernière Chemise de l'Amour*. There is another illustrious and ever-memorable instance of a translation into French that somehow seems to miss the exact English meaning of a well-known passage in the second part of *Henry IV.*, when Morton comes to Northumberland and dares not tell him that Harry Hotspur is dead. Northumberland says:

"Even such a man, so faint, so spiritless,
So dull, so dead in look, so wo-begone,
Drew Priam's curtain in the dead of night."

The translator rendered the words "so wo-begone," "*Ainsi, douleur, va-t'en!*" of which it would be flattery to pretend that it expresses just what Shakspere had in mind to say and what he in fact said.

I know perfectly well that I have strayed somewhat from my theme, but I must go still another step out of the way, to record a translation made by a Hindoo student of the hymn, *Rock of Ages*. After it was completed, it was retrotranslated from the Hindoo into English, and found to read:

"Very old stone, split for my benefit,
Under one of the fragments permit me to absent myself."

To be sure, names may be more accurately translated than is possible with ideas that are more diffuse, yet an anecdote is related, in the *Mémoires du Chevalier de Grammont*, of a Spanish ambassador to the English court, which shows that even in the translation of names there is a peril. The Spaniard rejoiced in the haughty and resounding name, Don Pedro de la Silva. He rode through the streets of London to the accompaniment of whispers and a subdued hum of admiration among the people, who murmured his name to each other with a feeling of awe. But when a wag announced that the proud name, Don Pedro de la Silva, meant only "Peter Wood," derision succeeded to admiration and taunts to respect. Indeed he was compelled to depart from English soil with his mission unaccomplished, so numerous were the indignities heaped upon the vulgar name of Peter Wood by the very citizens who were almost ready to prostrate themselves before the name Don Pedro de la Silva. Another Spanish ambassador, who came on a mission during the reign

of Elizabeth, felt humiliated when he learned that he would be entertained by a Londoner named John Cutts. He thought it impossible that anything but an affront was intended him in assigning him to the care of a simple citizen with such a name. Nor could the profusion of hospitality with which he was welcomed by his opulent host, reconcile him to the monosyllabic name by which he was compelled to address him. The proudest family of kings that ever reigned derived their name from the lowly plant from which brooms were made. Richard Plantagenet, the Lion-hearted, was satirized by the name "Dick o' the Broom."

Some names should never be translated for it would be to destroy them. Pelagatti and Mangiagatti, names of eminent Italian families, ought not to be turned into their English equivalents at all (Skincats and Chawcats), and I am by no means sure, if slander were an extraditable offense, that anyone who should venture to translate them might not be compelled to justify his versions in an Italian court of law, on a charge of libel at least.

Cats seem to be frequent ingredients in Italian names. The greatest work of Donatello is a statue, in the otherwise bare piazza of Padua, of the great fifteenth-century *condottiere*, Gattamelata, whose name seems to refer to some forgotten confection of cats and honey, and suggests, like that of Bishop Badham, an inherent contrariety between the name and the profession of its bearer. The Italians have a pithy saying, "*Traduttori, traditori*" (translators, traitors), which would seem to hold out little encouragement to the further consideration of the meaning of Italian names.

When the French ambassadors sought in Castile for a wife for Louis VIII., the choice was given them of

either of two of the daughters of King Alfonzo VIII. Doña Urraca was the more beautiful and queenly, but they passed her by and chose Doña Blanca, being convinced by her name alone that good fortune would attend her. So fully did she justify their selection that she became the mother of Saint Louis, and won so entirely the love and admiration of France, that when her son, the king, was waging war against the Saracens, she, though seemingly doubly disqualified, as a woman and as a foreigner, was chosen regent of the kingdom, and not only once but several times the destinies of France were intrusted to her keeping.

Among the French, Anne and Marie are used as names of men as well as of women. The Constable of France was at one time named Anne de Montmorency or Anne de Bourbon, I forget which at this moment, but I think the office has been borne by both of them. Elizabeth of England was spoken of, from the strength and decision of her character, as King Elizabeth, and James, her successor, from possessing qualities of an exactly opposite kind, was often alluded to in derision as Queen James. A tradition arose in the thirteenth century that a woman once occupied the papal throne under the name of Pope Joan. Martin Polonus, it seems, originated the story, which was in effect that a woman adopted male attire, and under the name John Anglus entered a Benedictine monastery, in order that she might enjoy the society of her lover, who was a monk. She went with him to Athens and learned Greek, and afterward returned to Rome and obtained great fame for her learning. From professor of Greek she was raised to the papacy, for there was no suspicion of her sex, and she exercised the power of the Church with the admiration and respect of all. Meanwhile,

in the midst of her splendor, she was suddenly overwhelmed by an unmistakable intimation that her secret relations with the monk were about to bear fruit. An angel appeared to her one night, as her term approached, and announced to her that she might choose one of two alternatives: either first to hide her condition, suffer in secret, conceal her offspring, continue to rule the Church, and finally lose her soul; or second, to endure the unspeakable humiliation and disgrace of a public disclosure, be overwhelmed with infamy, be thrust from the Church, and at the end be admitted to Heaven. The poor woman had a great and noble soul. She chose the better part, and in token that her expiation was acceptable to Heaven, it was granted to her to become a mother while the public procession in which she took part was returning to the basilica of St. John Lateran. The story needs no refutation. It is utterly mythical and fantastic. No one ever believed it whose belief would have lent it credit, and yet it has a moral value that would not dishonor the papacy.

That names have a mystic influence over those who bear them, that a Pompey or a Cæsar should be impelled by his name to great deeds, is a belief that meets some severe blows from the hands of time and history. "Honorius," if names have such virtue, should protect its bearer from personal degradation. There was an Emperor of Rome named Honorius who ascended the imperial throne in 395. The affairs of the Empire were left to the direction of Stilicho, while Honorius gave himself up to raising fowls. He had a favorite rooster to whom he gave the name "Rome." In 410, when the Emperor was twenty-six years of age, the news came to him in Milan, whither the seat of empire had been removed, that Rome had perished.

"It is impossible!" cried the Emperor, in anger and consternation; "an hour ago he ate his breakfast out of my hand."

When he was informed that it was only the city of Rome that had been destroyed, he was greatly relieved, but he did not fail to chide the messenger for giving him such an unnecessary shock; after which he went out to assure himself that the "Rome" he really cared for was safe. Honorius seems to have had a distorted perception of relative values.

Among the names that Alexander Pope consigned to perpetual infamy in the *Dunciad*, is that of Curril, who was doubtless from his birth destined to misfortune. He was "a rascally bookseller of London," who wrote such unpleasant obituaries of the men of letters of his time, under the title of biographies, that Dr. Arbuthnot said of him that he had added a new terror to death. In annotating the *Dunciad*, Arbuthnot added to the name of Curril the statement, "Edmund Curril stood in the pillory at Charing Cross in March, 1728." In another place Arbuthnot said that Curril "was tossed in a blanket and whipped by the scholars of Westminster." Curril answered with a burst of indignation against Arbuthnot, affirming that he did not stand in the pillory in March but in February, and that he was not tossed in a blanket but in a rug.

In writing these pages my purpose is not instruction. Who am I, to instruct? Nor is it to establish any system of onomatomancy, whatever that may be. It was to furnish, on the text of Bishop Badham, an hour's diversion by the rambling recollection of such names as have more or less interested me and may perhaps interest others.

Names are not considered as possessing occult and

compelling influence since John Keats, in spite of the ridicule with which Byron sought to deluge his name, obtained his unquestionable eminence among the best of English poets. Camden, who has written more exhaustively on the subject of names than anyone else whom I have read, evidently recognized this truth, and I cannot close this paper better than in his own words:

Memorable is that which may be observed out of histories, how that men of the self-same name have begun and ended great States and Empires: as Cyrus, the son of Cambyses, began the Persian Monarchy, Cyrus, the son of Darius, ruined the same; Darius, the son of Hystaspes, restored it, and again Darius, the son of Arsamis, utterly overthrew it. Philip, the son of Amyntas, especially enlarged the Kingdom of Macedonia; Philip, the son of Antigonus, wholly lost the same. Romulus founded Rome, and Augustus established the Empire; Romulus Augustulus brought both to a fall. Constantinus Magnus first began the Empire of Constantinople; Constantinus the last left it to the Turks and utterly lost the same.

V

ON ROYAL AUTHORS

WHILE that very excellent and accomplished gentleman, Don Quijote de la Mancha, lay in bed recovering from his bruises, the priest and the barber, with the approval of the niece and with the active aid of the secular arm of the housekeeper, formed themselves into a Congregation of the Index and proceeded to examine the books which composed his library. Among the half-dozen books which alone seemed to the self-commissioned inquisitors worthy of salvation, Cervantes reckoned the *Palmerin de Inglaterra*, not only "because it is good in itself but because it is said to have been written by a wise King of Portugal." It has long been a matter of common knowledge that Cervantes was in error in ascribing to a King of Portugal a story that was written by Luis Hurtado, but the mere conjecture of its royal origin, which Cervantes does not positively affirm, sufficed to insure its rescue from the flames.

One would think that if there were an absolutely uniform field where all men might meet in equal competition, where the prestige of rank could not deflect the award of justice, literature would be such a field. One would imagine that here at least merit alone would sway and determine judgment. But it is

not quite so even here. Nothing is more general nor indeed more legitimate than a desire for a knowledge of the circumstances under which a book was written, and in this incidental and collateral inquiry lies much of the interest of the work itself. It avails us to know that *Don Quijote* was conceived and partly written while its author lay in prison. We read the circumstances of the author's life into his work and they increase the gentle compassion with which we contemplate the knight of La Mancha. The history of Molière's life gives a gentler, kindlier flavor to his fun. The conditions under which *Rasselas* is said to have been written form almost its entire claim to our attention. Hood's portrait lends delicacy to his pathos, sweetness to his earnestness, and pungency to his humor. Dr. Arbuthnot, in his notes to the *Dunciad*, copies a quatrain about Edward Roome:

“You say that Roome diverts you with his jokes,
Yet when he writes is dull as other folks;
The reason is not very far to trace,
You lose the jest unless you see his face.”

Bunyan illustrates his own work; Cowper's life is a key to his poems; the mystery of “Junius” lent an interest to his letters. Indeed, this is so generally true that it is impossible to separate an author from his works; and yet the distinction must be made that whereas, with other men of letters, the early interest centers in their work, and one afterwards seeks to learn something of the authors themselves, yet with royal writers the first interest lies in them, and their books are rather of secondary concern. Henry VIII.'s reply to Luther derived its weight from his position

more than from his arguments. Jeremy Collier says "it was written with the sceptre."

Burton tells us that kings and emperors do not build poems but cities. It is true that Alexandria, Constantinople, and St. Petersburg represent a higher effort of imperial genius than is to be discovered in any literary works by royal authors, but these last also have been by no means neglected. Still, the cultivation of letters, except as a pastime, has been generally considered to constitute a derogation of royal dignity; Julian is said to have "stained the imperial purple with an author's ink." Themistocles glanced at the same idea and seemed a little to disparage that softness of mind that is imparted by the study of the finer arts when he said disdainfully, "that he could not play on the fiddle, but that he could make a small town a large city." The Stuarts, on the contrary, were all good fiddlers, but they neglected the sterner pursuits of kings.

The records of royalty contain the names of many kings who never reigned. In England the title was successfully disputed to James III., Charles III., and Henry IX.; but also Edward V. can scarcely be said to have reigned more than Louis XVII. of France. Some kings were prevented from entering the proud list of authors by being disqualified through their ignorance. Charlemagne was one, for he "only began to learn to write when he was advanced in life, and never thoroughly mastered the accomplishment." Pizarro could not even read. It was with difficulty that he contrived to make the rubric or paraph, which flourished on the page, after his secretary had written his name. Theodosic, the Emperor, was equally ignorant. He may be said to have been the luckless wight under whose

auspices the darkness of ignorance began, which endured for six centuries, until the dawn of learning and the renascence of opinion began with Abelard. Some kings again have ruled under a different title. During the period of the Republic, the Roman rulers were styled Consuls, as in an earlier day Moses was called distinctively a law-giver. To Moses, an early group of theological historians ascribed that wonderful code, the Pentateuch, into whose actual authorship the wise man of to-day will forbear to inquire, for the same reason that impelled Horace to refuse to discuss the origin of the Amazonian customs, lest he might become involved in troublesome disputation. To Moses also was awarded the authorship of the book of *Job*—the most magnificent comedy of the ages—which a later generation of critics now refuses to look upon as older than the period of the Captivity. David and his son Solomon, however, were kings in name as well as in fact, and their influence on literature is enduring and intimate. The 139th Psalm, upon whose authenticity I believe no doubt has as yet been cast, is one of the most profound and magnificent of all poetic utterances.

Cicero says that Peisistratus collected the Homeric lays, until then scattered, and arranged them as we have them. (*Primus Homeri libros, confusos antea, sic disposuisse dicitur ut nunc habemus.*) Heraclitus of Ephesus, surnamed the “Obscure,” was of royal descent. He wrote a book *On Nature*, a favorite theme among the Asiatic Greeks, which he dedicated to Artemis, “because he did not expect men to understand it.” He was not mistaken in his estimate of the profundity of his work, for Socrates, being asked for his opinion of it, replied, that “what of it he understood

was excellent, but to get to the bottom of it would require a diver of Delos." It was Heraclitus who first fell foul of the poets, declaring that Homer deserved to be publicly scourged. So Dr. Arbuthnot records the fact that John Dennis "called Shakspere a rascal." So Diogenes Laërtius tells us that Theocritus of Chios wrote an epigram on Aristotle, wherein he called him "Empty-headed Aristotle." Still later, that is to say about the middle of the eleventh century, Aristotle received the distinction of being solemnly excommunicated by the Bishop of Paris, as Selden notes in his *Table-Talk*.

Athens, of course, contributed kings neither to literature nor to history. Peisistratus was a usurper and Heraclitus was an Ionian. Nor did the kings of Lacedæmon or of Thebes or of Macedonia amplify literature by their contributions. Dionysius of Syracuse, however, cultivated the drama sedulously, and sent plays to be acted on the Athenian stage, to the great sport of Athens. His son, too, the younger Dionysius, was as great a philosopher as the father was a poet, and after he was deposed from the throne, made his way to Corinth, where he opened a school.

Rome, however, had, if not kings, at least Consuls. Cæsar scoffed at the illiteracy of Sulla the Dictator, in an innuendo which also impeached his ability to rule,—*Sulla nescivit literas, non potuit dictare*. If it be objected to Cæsar that he was not a king, he has himself given an answer; for when he was hailed "Rex! Rex!" by some hired voices among the Roman populace, he, who already possessed more than royal power, being dissatisfied with the meager shout, turned to them and said, "*Non sum Rex sed Cæsar*," as if his own

name was superior to the royal title, as indeed it has continued to be for two thousand years. Cicero was Consul at a time when the consulship was the supreme office of the Roman State, and Consul a far prouder title than king. Seneca was Consul, but at a time when the consulship was an office of reflected and not inherent dignity, and the Consul was powerful with a delegated authority. Tacitus in the same way was Consul under Nerva, and Quintilian under Domitian; Boëthius, the author of the *De Consolatione Philosophicæ*, was Consul under Theodoric, who put him to death as Nero did Seneca.

In the Augustan age, everybody wrote poetry. Horace notes the fact in the first epistle of the second book.¹ Ovid gives us a multitude of names of men who wrote poems that are now happily lost. The whole family of the Pisones were infected, and Horace gave them some advice that seems to have cured them. Even Mæcenas and Augustus himself wrote poems. To be sure, they were very bad ones. Montaigne quotes the verses of the great Augustus in his essay entitled *Apology for Raimond Sebond* and addressed to Marguerite d'Angoulême, the author of the *Heptameron*, but Hazlitt, who does not balk at Catullus or elsewhere at Martial, refuses to translate Augustus's verses. Mæcenas was but the minister of Augustus, and yet he more nearly claims admittance among royal authors by birth than by poetical merit, for Horace mentions his descent from the ancient kings of Etruria, and some verses that he wrote, Seneca has dignified by preserving them for us. Perhaps the obsequious minister was desirous not to surpass the Emperor in merit. In this case his desire was achieved,

¹ "Scribimus indocti doctique poemata passim."

for Augustus displays an easier grace than Mæcenas. Here are the minister's verses:

*"Debilem facito manu,
Debilem pede, coxa;
Tuber astrue gibberum
Lubricos quate dentes;
Vita dum superest, bene est—"*

which may be translated:

Paralyze me, foot and hand,
Lame me that I may not stand,
Round a hump upon my back,
Pluck my teeth from out their rack;
While the breath of life remains,
Life is sweet for all its pains.

If Henry VIII.'s "Assertio" was written with the scepter, these verses of Mæcenas must have been penned with a club.

The high tide of Augustan literature overflowed into the reigns of his successors. Hume computes that "of the first twenty Roman Emperors, counting from Julius Cæsar to Severus, above the half were authors; and though few of them seem to have been eminent in that profession, it is always remarked to their praise that by their example they encouraged literature."

Caligula is said to have had some repute as an orator. Claudius Cæsar wrote a history of Tyre and Carthage, whose theme is the most alluring and whose recovery would be the most desirable of any of the lost Roman writings except perhaps Varro's *Antiquities*, which was in existence up to the time of Petrarch. It has been always a source of keen regret that no authentic work on Carthage has come down to our days. Sallust

says somewhere of Carthage, “*præstat silere, quam pauca dicere*” (“it is better to say nothing than to speak briefly on that theme”). Claudius took pains certainly that his book might be transmitted to posterity, for he endowed a chair in the Library of Alexandria for the study of it. Hannibal’s marvelous career would have been less a failure, if he had written the history of his Italian wars, as Cæsar did of his conquest of Gaul, and the Greek historian who attended him in Italy lost the greatest opportunity that ever fell to the lot of man, to win a lofty place in the annals of literature. Claudius also wrote a *History of Rome from the Death of Julius Cæsar*, in forty-three books, which is likewise lost.

Nero possessed much artistic versatility and wrote poetry that Cruttwell thinks “must have possessed considerable merit.” His *Trojæ Halosis* was ridiculed by Petronius and blistered by Juvenal. It has not come down to us. He projected a poem on Roman history in four hundred books, but is not known to have begun it. In fact, work irked him. Seneca wrote his speeches and Petronius directed his diversions. Of Petronius we know perhaps too little; of Seneca we know unfortunately too much, if it be true that he wrote a eulogy on Messalina and a defense of Nero’s matricidium. Nero recited his own verses and perhaps wrote his own songs. His arbitrary vanity was without restraint. He contended in public with professional singers and they were too wary to surpass their imperial antagonist. One of them, Paris, he put to death because he sang too well, and afterward all who contended with him were careful to sing as badly as possible. When he sang, no one was allowed to leave the theatre under penalty of death, and women brought forth on the benches, while men

counterfeited death and were carried out for burial, as their only means of escape. It is one of the advantages of supreme power that it enables an author to compel an audience. "*Qualis artifex pereo!*" were his last words. Emerson says that "Carlyle liked Nero's death better than most history." He was not an indulgent patron of letters. He put Seneca to death, he put Petronius to death, he put Lucan, his intimate associate, to death, out of envy. He thus prepared the way to his own supremacy in letters.

Hadrian "mortally envied poets,"— perhaps because he also wrote poetry. He recited some of his own verses, "to his soul," on his deathbed. Pope, thinking to paraphrase them, substituted his own thoughts for Hadrian's, and wrote something entirely different. Hadrian says nothing like

"O! the pain, the bliss, of dying!"

Here are Hadrian's verses. They are very brief:

"*Animula vagula blandula,*
Hospes comesque corporis,
Quæ nunc abibis in loca,
Pallidula rigida nudula,
Nec ut soles dabis jocos?"

Ariel might have written them, if he had been possessed of a soul. To translate them in verse is not easy, although many attempts have been made, that of Dean Merivale being the most faithful:

"Soul of mine, pretty one, flitting one,
Guest and partner of my day,
Whither wilt thou hie away,
Pallid one, rigid one, naked one,
Never to play again, never to play?"

I will record also my own failure:

Breath of life, so frail, so dear,
Whose mirth is hushed by sudden fear;
Tell me, whither wilt thou depart,
Guest and companion of my heart?
Why leave the comfort of thy home,
Far in sightless wilds to roam?

And perhaps the thought may be completed thus:

Whether do I go or stay,
Fall to earth or speed away?
Am I the soul or but the clay?

“One day a philosopher, having to dispute with Hadrian, argued but lamely and came limping off. His friends chided him for not speaking better. ‘What?’ he cried, ‘would you have me contend seriously with one who commands thirty legions?’” For all his envy of the poets, however, Hadrian, realizing the value of the good-will of those abstracts and brief chronicles of the time, erected in Rome an Athenæum where they might read their works in public.

Marcus Aurelius, a dilettante Stoic, wrote some reflections which are almost as noble and searching as the utterances of Epictetus, the slave.

Don Jaime I., of Aragon, wrote the “Chronicle” of his long and splendid reign of sixty-three years (1213-1276), and John Forster has done it out of Catalan into English. He was a wise old king, and held a firm control over his turbulent nobles and his unruly sons. Aragon seems to have been blessed above any other country with kings that were truly great. Don Jaime was closely related to San Fernando and to St. Louis. His wife, Leonor, was sister to Blanca, the

mother of St. Louis, and to Berenguela, the mother of San Fernando, whose reign Viardot considers "the most glorious reign of the Middle Ages." But with two such eminent saints in the family, Don Jaime never aspired to the honors of sanctity. On the contrary, he was excommunicated by the Church for the only weakness that we can detect in that resolute, self-contained soul,—his fondness for ladies' society. His marriages were as scandalous as those of Henry VIII. of England, without the added horror of sudden death, that attended the nuptial pleasures of Henry, and perhaps enhanced them.

Don Alfonso el Sabio ("The Wise"), of Castile, (1252–1284), was the son of San Fernando, and became allied more firmly to Don Jaime I. by marrying his daughter Violante. There is a marked likeness in character between Don Alfonso and James I. of England. The same wandering genius, the same sudden self-assertion, the same lack of sustained purpose, characterize both. There was little that was royal about them but the title.

But upon literature their influence was immense and permanent. James of England directed the translation of the Bible into the common tongue, and thus confirmed and perfected modern English speech. Alfonso of Castile collected and translated the whole system of Spanish jurisprudence from Latin into the vernacular tongue, and thus established the foundation of Spanish law and of the Spanish language. James was a theologian, Alfonso a jurist; but while James confined his activities to dabbling in theology and a little poetry and an occasional tract on subjects so trite that there was nothing new to say on them, or so trivial that there was no need of saying anything,

Alfonso's learning went far beyond the "Fuero Juzgo" and the "Siete Partidas." Astrology, philosophy, geometry, alchemy, occultism in all its then known forms, the cultivation of lyric and ballad poetry, religious chants, a general chronicle of Spain, a universal history, and a translation of the Bible into Spanish, are to be enumerated among his achievements. His range of literary activities was wider than that of any other king that ever reigned, and the results were more far-reaching and durable. His fame for learning suggested his election as Emperor of Germany, the highest secular honor in Christendom; but while he was, almost beyond measure, proud of the honor thus bestowed, yet his love of studious ease detained him ignobly from the actual formalities of his coronation and investiture, until the Imperial Electors were compelled to annul his election and, passing over his competitor as well, Richard of Cornwall, chose Rudolph of Hapsburg Emperor, in whom originated the most powerful and enduring race of kings that Europe has known.

Much of the work that is ascribed to Don Alfonso was doubtless done rather under his direction than by his personal effort. He must have had a corps of assistants who collated the ancient Spanish laws, the royal decrees, the ecclesiastical canons and Justinian's Code, and under his supervision translated the digested product into the new Castilian tongue. Still the "Siete Partidas" is more accurately the work of Don Alfonso than the Code of Justinian or the Code Napoléon is the work of its name-father. Don Alfonso's Digest is not only the foundation of Spanish jurisprudence, but constitutes the body of the law which yet governs Spanish America. The minute consideration of this great work belongs rather to jurisprudence

than to literature, but the *Cronica General de España* is a series of historical narratives from which all subsequent historians of Spain have drawn copiously. Mariana records his obligations to Don Alfonso. Some of Don Alfonso's verses are transcribed by Bouterwek. They are well worth reading, but scarcely demand translation here. They show the same facility of rhythm and the same correctness of rime that have always characterized Spanish verse.

The thirteenth century is one of the great periods of the world's history. It saw the institution of the two great mendicant orders, that of St. Francis and that of St. Dominic; the birth of modern thought and poetry in the Welsh mountains and the rush of the new spirit over all Christendom; the *Vita Nuova* of Dante and the recognition of modern languages as adequate literary instruments; the establishment of municipalities and of the modern system of taxation and of real property; the development of the ancient Droit d'Aubaine into the modern law of inheritance, and the general foundation and recognition of trade-guilds. This century witnessed also the definitive ascendancy of the Spaniards over the Moors, for Las Navas de Tolosa was fought in 1212, and the capture of Cordoba, Seville, and Valencia before the mid-century, left but little to accomplish, although the final conquest of Granada was delayed for two hundred years. This century also saw the first attempt at general legislation when, in 1223, an ordinance was passed, under Louis VIII. of France, which was intended to curtail the civil privileges of the Jews. The suppression of speculative heresy has often been regarded as a blot on the fair fame of this century, but Dr. Lawrie contends that the purpose of the Church was less the control of religious

vagaries, than the suppression of resistance to the political authority of the pope. The Albigenses were an anachronism, but what they wrote the last dawn of reckoning shall read. These events, together with the conquest of Oxford and Paris by the Franciscans, fell within the scope of Don Alfonso's life, and he himself was one of those great agents who, acting consentaneously throughout Christendom, embodied the living word of progress and light that their century was destined to utter. Don Alfonso found no comfort in the ancient Greek philosopher who while studying the stars fell into a well; even his title of "The Wise" has been disparaged, because, while he was engaged in these lofty and noble pursuits, his son, Sancho, stole his throne from under him and left him in the air. Perhaps a later generation, with a higher conception of wisdom, may yield him again the full meaning of the title which they at present deny him.

Don Felipe II. of Spain wrote a gloss on the quatrain:

*"Contentamiento, do estas?
Que no te tiene ninguno.
Si piensa tenerte alguno
No sabe por donde vas."*

*"Where, Contentment, dost abide?
None can keep thee at his side.
He who thinks he holds thee sure
Cannot force thee to endure."*

The gloss itself has little merit. Don Felipe knew nothing of contentment after the destruction of his Invincible Armada.

His grandson, Don Felipe IV., has been called the Spanish Mæcenas. He condescended to patronize

Lope de Vega, Guillen de Castro, Quevedo, Calderon, and Montalban, the great geniuses of Spanish literature. He criticized their work and his shallow comments actually directed their literary energies. His censure and his praise were feared or sought as if they were the very judgments of God. He might to-day be considered a wiser Mæcenas, if he had not, like Mæcenas, revealed his commonplace soul in his own writings. Schlegel praises him as a poet, but it does not seem probable that he had seen any of the royal poetry.

Some of it, however, remains to cheer a sad world. Here is the beginning of his sonnet on "Death":

*"Es la muerte un efeco poderoso,
Firme su proceder mal entendido;
Amada de Mitrídates vencido,
Temida de Pompeyo poderoso."*

"Death is a tyrant of resistless power,
Bent to achieve his unforeseen design;
By Mithridates wooed with poisoned wine,
By mighty Pompey feared,—for all his power."

It is useless to criticize such poetry. The thoughts are commonplace, the metre faulty, and none but a king could rhyme *poderoso* with *poderoso*. Don Felipe IV. was the next to the last step in the Hapsburg descent in Spain. His son, Don Carlos II., is known in the history of his own country as "The Imbecile," after whom came the war of the Spanish succession and a Bourbon king, the grandson of Louis XIV.

While Don Felipe IV. was yet reigning in Spain, a descendant of the ancient Kings of Texcoco was writing a series of works on the history of his country and of his ancestors. The works of Don Fernando de Alva

Cortés Ixtlilxochitl form a part of the publications of Lord Kingsborough and commemorate the achievements of a race that was adequately characterized by Sir Arthur Helps in the remark that "the Spaniards, in conquering Mexico, overthrew a higher civilization than their own." One of Ixtlilxochitl's ancestors was King Nezahualcoyotl, of whose poems about sixty were in existence after the conquest. Dr. Brinton has translated four of them into English, a few lines of one of which I will insert here. They were written in Mexico at about the time, 1431, when, in the market-place of Rouen, the flames were mounting around the devoted head of Jeanne d'Arc.

Sad it is to reflect on the prosperity and power of the old King Tezozómoc; watered with ambition and avarice, he grew like a willow-tree rising above the grass and flowers of spring, rejoicing long, until at length the storm-wind of death tore him from his roots and dashed him to the ground. Who can see this and refrain from tears that these various blooms and rich delights are but flowers that pass from hand to hand?

This is very like the lament of Moschus over the death of Bion, when he sings, "The glory of the garden fades to bloom again, but man, when he is once laid in the grave, keeps an everlasting sleep." The reflection of the Mexican poet is perhaps finer and deeper than that of the Greek, though it is at the same time more diffuse. It would have been better for the credit of humanity, if in 1431, when the Mexican King was inditing his elegiac meditations, the holy Bishop of Beauvais had been as innocently occupied.

The *quipu* of the Incas was as intractable a vehicle for poetry, as would be the Roman numerals without

the alphabet. Many of the finer nuances of wit, metaphor, and sarcasm must be lost, in an attempt to express them by means of a string with knots tied along at irregular intervals. The attempt may have been made but it was foredoomed to failure. Consequently, the race of Incas has left no literary memorial to swell the royal contingent that the Western Hemisphere has contributed to letters. Still, one of their descendants was the younger Garcilasso de la Vega, himself an Inca, who has written one of the most fascinating histories ever penned. Upon this single stalk rests all we know of the ancient kingdom of the Incas of Peru. Garcilasso Inca died in 1616, the same year that witnessed the deaths of Shakspere and Cervantes. Felipe, who was soon to become Don Felipe IV., and to write a sonnet to "Death," was at the time eleven years old.

Alfred of England, whom Freeman calls "a saint without superstition, a scholar without ostentation, and a conqueror without cruelty," translated into his own tongue one of the great books of the world, the *On the Consolation of Philosophy* by Boëthius. He corrected the *Ecclesiastical History* of Bede, and started English literature on its long and glorious path.

One of the Provençal songs which was written by Richard I., Cœur de Lion, has been preserved. It is said to be the one which Blondel sang while he wandered over Europe in search of the castle where his master, the King, was imprisoned. He finally came to the Castle of Tribales in Austria, a prison from which no one had ever escaped (*a quo carcere nullus ante dies estos exivit*), and sitting down before the castle, he sang the first part of the song which King Richard had written:

"Your beauty, lady fair,
 None views without delight;
 But still so cold an air
 No passion can excite;
 Yet this I patient see
 While all are shunn'd like me."

Instantly from the barred window of the castle a voice took up the song:

"No nymph my heart can wound
 If favor she divide,
 And smiles on all around
 Unwilling to decide;
 I'd rather hatred bear
 Than love with others share."¹

Thus Blondel found the King and, "returning to England, made the Barons acquainted where the King was. This happened about the year 1193." Richard II. also "*faisoit balades et chançons, rondeaulx et lais, tres bien et bel,*" as Horace Walpole mentions in his *Catalogue of the Royal and Noble Authors of England, Scotland, and Ireland*, published in 1758. Henry VI. also wrote some simple and melancholy verses which Walpole found to be "not better than a saint might compose." Henry VI. seemed in so much better repute as a saint than as a king or a poet, that Henry VII. "became suitor to Pope Julius to canonize him," but nothing was effected.

The general opinion was that Pope Julius was too dear, and that the King would not come up to his rates. But it is more probable that that Pope, who was extremely jealous

¹ Dr. Percy, in his *Essay on the Ancient Minstrels*, copies this translation from Dr. Burney's *History of Music*.

of the dignity of the See of Rome, knowing that King Henry VI. was reputed in the world abroad but for a simple man, was afraid that it would but diminish the estimation of that kind of honor, if there were not a distance kept between innocents and saints. (Bacon—*History of Henry VII.*)

Thackeray says that Addison's *Campaign* was a prize poem that won an enormous prize. Henry VIII.'s answer to Luther was less an essay than an assault, but it won a loud addition to the royal titles. "Defensor Fidei" was given him by Leo X. for the *Assertio Septem Sacramentorum adversus M. Lutherum*. Henry was destined for the Church, if Arthur had not died, and the occasion was a welcome one to display his erudition. This, however, did not prevent much dispute as to the authorship of the *Assertion*. The opinion was current among its contemporaries that it was probably the work of many hands. In the *Calendar of State Papers between England and Spain*, edited by Bergenrath, it is said: "The King of England has sent a book against Luther to the pope. It is thought that all the learned men in England have taken part in its composition." In the *Works of John Fisher, Bishop of Rochester*, published in 1597, the *Assertion* is included, being ascribed to that prelate. Pallavicini and Clement Villecourt, the Bishop of La Rochelle, favor Fisher's claim. Thomson in his *Memoirs of the Court of Henry VIII.* says, "The world has attributed all that is valuable in this work to the assistance of Bishop Fisher and of Sir Thomas More." Many believed that More wrote it. Dr. Edward Lee, afterward Archbishop of York, was "also credited with this performance," and even Luther intimates

that the King commissioned Lee to write it. Wolsey was suspected by even a greater number of contemporary writers to be responsible for the *Assertion*. In Germany, Erasmus was thought by so many scholars to be its author that he published a labored refutation of this ascription. But both More and Erasmus declare that they believe Henry to have been the author, and certainly their testimony may easily outweigh the conjectures of their contemporaries, much more than that of all later authorities. Bishop Fisher, with some heat, rejects the claim that had been made in his behalf, saying, "Let Henry enjoy his own meed of praise without participation." More says explicitly that his own labors were confined to making an index to the work, and Luther, while pretending to believe that Lee had made into a garment the cloth that the King gave him, yet directs all the bitterness of his reply to Henry and not to Lee. With the *Assertio* itself and its clumsy arguments and its awkward Latinity, we can have no earthly concern. Erasmus's position at this crisis of Christianity may be inferred from the fact that the reply of Luther to the King was also thought by many to be his work.

Queen Elizabeth may be suspected of deriving her literary taste from Anne Boleyn, if the verses which Sir John Hawkins ascribes to Anne were really hers; for several of Elizabeth's poems have been preserved. Dr. Percy gives two in his *Reliques*, one of which, with some compunction, I transcribe:

"Oh, Fortune! how thy restless wavering state
Hath fraught with cares my troubled witt!
Witness this present prisonn, whither fate
Could beare me, and the joys I quit.

Thou causedest the guiltie to be losed
From bandes, wherein are innocents inclosed;
Causing the guiltles to be straite reserved
And freeing those that death hath well deserved.
But by her envie can be nothing wroughte
So God send to my foes all they have thoughte."

She was not so proud of these verses as to send a copy of them to her sister, Queen Mary.

They were written in 1555 in Woodstock, where her sister kept her imprisoned. Woodstock had formerly been a royal park, where Henry II. built Rosamond's Bower, to shield his mistress from the jealous eyes of Eleanor of Aquitaine. Scott says it was the first enclosed park in England. Edward, the Black Prince, was born here in 1330, and Thomas of Woodstock in 1355. Here, too, Geoffrey Chaucer was born in 1340, in a house by the park gates. Here, some centuries later, Prince Charles sought refuge after the battle of Worcester. Two generations later yet, a grateful nation bestowed it upon the victorious Marlborough, who renamed it "Blenheim" from the greatest of his victories, but died before the architect, Sir John Vanbrugh, had completed the stately but vexatious pile. Bishop Percy prefaces another poem of Elizabeth's with the remark, that "the slightest effusion of such a mind deserves attention," which must likewise justify the transcription into this paper of the verses just given. Elizabeth also translated a play of Euripides, two of Isocrates's orations, Boëthius, the *Jugurtha*, and Horace's *Ars Poetica*.

Elizabeth's cousin, Mary Queen of Scots, wrote some verses in French, which Brantôme has preserved in his *Vies des Dames Illustres*. She thus belongs to

French rather than to English royal writers. Some of the stanzas in which she bewails the death of her husband, Francis II., I will translate:

Be sad and sweet the song
That I in sadness make!
In grief can be no wrong,
Albeit my heart should break
While bidding, through my tears,
Farewell to happy years.

What pleased me oft before,
Increases now my pains;
Though Day throws wide his door,
Darkness within me reigns.
I only find relief
Commercing with my grief.

When in the early spring
And blossom of my years,
Such sorrows to me cling
And naught of hope appears,
I mourn my absent friend
And wish my life might end.

No object meets my eyes,
Engaging though it be,
Can make my spirits rise,
Or glad the heart of me.
Whatever greets my sight
Brings grief and not delight.

In some obscure retreat
In desert, field, or wood,
When Morning veils her feet,
Or Evening draws her hood,
My heart pours forth a moan,
That I am left alone.

Poor little verses and poor little Queen! She was surprised that God would dare to interrupt the current of her happiness. She was just eighteen when Francis died, and he was two years younger. To him the consumptive Charles IX. succeeded, lurking behind the curtains of the Louvre with gun in hand, to take a pot-shot at a chance Huguenot. Mary was not the only Scottish princess who found sorrow in France, and who beguiled her grief by writing poetry, for one of the saddest figures in all minor literature is the unfortunate Margaret Stuart, who was married to the Dauphin, afterward King Louis XI.—that paradigm of perfidy. She sought in poetry, not comfort, but only forgetfulness, twelve rondels daily marking the extreme degree of her suffering. With this key the poor Queen unlocked her heart, but her little poems have eluded posterity. Some of her husband's tales have had better fortune, being yet extant in the *Cent Nouvelles Nouvelles*, to which collection I find that the King contributed nine, Charles of Burgundy four, while the rest are by gentlemen of Burgundy and France.

James I. of Scotland, one of that noble and unfortunate race who have transmitted unto our day the glorious blood of Robert the Bruce, lived for eighteen years in a prison—a goodly one—in England. His elder brother was that Duke of Rothsay whom the Regent, Albany, starved to death in his castle of Falkland. A wild young generous soul was Rothsay, who incurred simultaneously the anger of his father the King, the hatred of his uncle the Regent, and the resentment of his father-in-law, Douglas the Tineman. After his death Rothsay was found to have eaten his hands off to appease his hunger. Tragedies were written on him, as sad as those presenting Thebes or

Pelops' line. To guard the young James from a similar fate, the old King sent him forth of the kingdom to be educated in France. This was soon after the battle of Shrewsbury, where Douglas joined his forces to those of Hotspur and Worcester to withstand King Henry. The English King caused the young prince to be captured and brought to London. For eighteen years he remained in England, during the latter part of Henry of Bolingbroke's reign, all of that of Harry of Monmouth, and for several years of the reign of Henry of Windsor. Here in prison, or at least a prisoner, he wrote those verses to Joanna, the daughter of the Earl of Somerset, which won the lady for his wife, and were thus instrumental in opening the way for his return to his throne.

These verses were *The King's Quhair*, which is to say *The King's Book*. A satiric poem, *Christ's Kirk on the Green*, has also been ascribed to him. Warton speaks highly of James's poems, and George Buchanan extols his versatile excellences.

James V. possessed the easy virtues and the artistic graces of his family. He was pleased to wander about his kingdom, disguised as a small farmer or "tenant," and to indulge in adventures and even in intrigues with his subjects. There is reason to believe that, like Harun-Er-Raschid, he thus frequently righted wrongs that were not visible from the throne, and corrected injustice among the more humble classes of his people; but the purpose of his wanderings was primarily his own royal pleasure. Indeed, it must have seemed like a re-accession to the throne, to doff the garb of a small farmer and resume the port of a king. Scott introduces one of these incognito excursions of James, into *The Lady of the Lake*, and it is probable that *The Gaberlunzie Man* was suggested by a similar incident. This poem

and *The Jolly Beggars* were without doubt written by James V. Bishop Tanner and Bishop Percy ascribe to him also *Christ's Kirk on the Green*, which Sir Walter Scott rather assigns to James I. Of Sir Walter it may be said, as Dr. Johnson once said of Goldsmith, that his opinion it is seldom safe to dispute; but Bannatyne, whose manuscript was written in 1568, only twenty-six years after the death of James V., also awards this poem to James I. and this ascription is thus on the whole the more probable, although by no means indisputably certain. No dispute about the matter could have occurred if a copy had existed earlier than 1520. *The Gaberlunzie Man*, as representing the most spirited poem contributed by royalty to literature, must be given in full. A *gaberlunzie* was a beggar—what the Spanish called a *pícaro*.

THE GABERLUNZIE MAN

The pawky auld Carle came over the lea
Wi' mony good-eens and days to me,
Saying, Goodwife, for your courtesy
Will ye lodge a silly poor man?
The night was cauld, the carle was wat,
And down ayont the ingle he sat,
My daughter's shoulders he 'gan to clap,
And cadgily ranted and sang.

O, wow! quoth he, were I as free
As first when I saw this countrie
How blyth and merry wad I be!
And I wad never think lang.
He grew canty and she grew fain;
But little did her auld minny ken
What thir slee twa together were say'n
When wooing they were sa thrang.

And O! quo he, as ye were as black
 As ever the crown of your daddy's hat,
 'Tis I wad lay thee by my back

And awa wi' me thou should gang.
 And O! quo she, an I were as white
 As ever the snaw lay on the dyke,
 I'ld clad me braw and lady-like,
 And awa with thee I'ld gang.

Between the twa was made a plot;
 They raise a wee before the cock,
 And wyliely they shot the lock,

And fast to the bent are they gane.
 Up in the morn the auld wife raise,
 And at her leisure put on her claithes,
 Syne to the servant's bed she gaes
 To speir for the silly poor man.

She gaed to the bed where the beggar lay,
 The strae was cauld, he was away,
 She clapt her hands, cried Doleful day!

For some of our gear will be gane.
 Some ran to coffer and some to kist,
 But naught was stolen that could be missed,
 She danced her lane, cried Praise be blest!
 I hae lodged a leal poor man.

Since naething's awa, as we can learn,
 The kirns to kirn and milk to earn,
 Gae butt the house, lass, and waken my bairn

And bid her come quickly ben.
 The servant gaed where the daughter lay,
 The sheets were cauld, she was away,
 And fast to her goodwife can say,
 She's aff with the gaberlunzie man.

O fy! gar ride, and fy gar rin,
And haste ye, find these traitors again;
For shes be burnt and hees be slain,
 The wearyful gaberlunzie man.
Some rode upon horse, some ran a fit,
The wife was wood and out o' her wit,
She could na gang, nor yet could she sit,
 But aye, did curse and did ban.

Meantime far hind out owre the lee,
For snug in a glen where none could see,
The twa, with kindly sport and glee,
 Cut frae a new cheese a whang.
The priving was good, it pleased them baith,
To love her for aye, he gae her his aith.
Quo she, to leave thee, I will be laith,
 My winsome gaberlunzie man.

O, kend my minny I were with you
Ill fauredly wad she crook her mou,
Sic a poor man she'd never trew
 After the gaberlunzie man.
My dear, quo he, your'e yet ower young
And hae na learnt the beggar's tongue
To follow me frae town to town,
 And carry the gaberlunzie on.

Wi' kauk and keel, I'll win your bread,
And spindles and whorles for them wha need,
Whilk is a gentle trade indeed
 The gaberlunzie to carry-O.
I'll bow my leg and crook my knee,
And draw a black clout ower my ee,
A cripple or blind they will call me,
 While we shall sing and be merry-O.

James V., it will be seen, did not, like his uncle, Henry VIII., write with a scepter.

Æneas Sylvius, Piccolomini, was poet-laureate to the Emperor Frederick III., and, in addition to his often-cited *Commentaries*, wrote amatory and even erotic poems. When he became Pope, he dropped the "Æneas" but retained the "Pius," becoming known as Pius II. Many of the popes have contributed to letters, Leo XIII. having written some particularly beautiful Latin verses. His *Christus adest*, written on his ninetieth birthday, reminds one of Catullus. The *Heptameron* was written by the Queen of Navarre, Marguerite d' Angoulême, who was the sister of Francis I. and the grandmother of Henri IV. No translation can reproduce the exquisite charm of that beautiful French of the sixteenth century. It lends a delightful fascination alike to Brantôme and to Clement Marot, different as they are in all other respects. The style of the *Heptameron* is so fine, so naïf, so spirituelle, that it can scarcely be described in English terms. The tenth tale and the seventieth, especially, are wonderfully fine. In some of them there is a touch of mysticism that seems to recall a trace of the long-lost *gai saber* of Geoffroi Rudel and the early minstrels of Provence.

Anna Comnena finished the *History* of the reign of her father, the Emperor Alexius Comnenus, a work which her husband, Nicephorus Briennius, had brought almost to completion. Berington considered this *History* to be one of the greatest works in all Byzantine literature. An earlier Emperor of Constantinople, in fact Constantine himself, is said to have written a work in twenty books on agriculture, which, a generation earlier, Diocletian had neglected to do.

Of Frederick the Great, of Carmen Sylva the Queen

of Roumania, of Queen Victoria, of our own Presidents, and of many others, we must forbear to speak, worthy of consideration as some of them doubtless are.

Among the works of James I. of England, the *Basilicon Doron* possesses a peculiar interest. It was a book of paternal instruction and of practical philosophy, and was intended to serve as a guide to the youthful steps of Prince Henry. In itself the "Royal Gift" possesses little merit; but as the precursor and parent of the *Icon Basilike*, its title acquires importance. When Henry died in early manhood, Charles became the heir-apparent to the throne, and the *Doron* was put into his hands to teach him his royal duties. On January 30, 1649, Charles, having reigned twenty-four years, was put to death and a few days later the *Icon Basilike* was published.

The effect of the *Icon* was marvelous. Milton compared it to the effect that was produced on the Roman people by the reading of Cæsar's will. The spirit of piety, charity, and humanity that animated it, filled all England with a passionate regret that such a king had met such a fate. In this very fact might have been read a presumption in favor of the King's authorship, for, like all of Charles's fine actions, it came too late to serve his cause. This is strictly true of every concession he made to Parliament, and seems to have been habitual with him. Within two years the book ran through forty-four editions. It is said to have contributed more largely than any other cause to the restoration of the Stuarts after Cromwell's death.

The *Icon* was at once attacked. Such a weapon must be blunted since it could not be destroyed, and for this end Selden's assistance was sought by the Parliament. But Selden was too wary to venture on such an un-

certain course, and after he had thrice refused their solicitation, the Parliament had recourse to the aid of Milton, who wrote the *Iconoclastes* indeed, but seemed to concede its royal authorship. Others, however, less scrupulous than Milton or more deeply involved in the death of the King, directed their attacks against the authenticity of the book, and having named John Gauden as its author, they actually succeeded in imposing that gentleman on the world as the “onlie begetter” of the *Icon Basiliæ*.

The present writer would be greatly in error, if he failed to perceive his unfitness for the discussion of this question. He had already read the *Icon* before taking up in his own mind the question of its disputed authenticity. The subject was still too warm for him not to feel the glow. He labored through the whole boiling welter from Milton to Tuckerman. In this investigation, one encounters abundant illustrations of every variety of discussion—narrative, argumentative, controversial, disputatious, polemic, acrimonious, abusive; rising one above another in a well-graded octave; where now logic prevails over rhetoric, and again rhetoric disdains the aid of logic. Tuckerman’s thesis is the best example of a purely argumentative treatment that has, as far as I know, yet appeared. It is true that Tuckerman decides against the King.

But, while disabling his own judgment, the present writer finds no impropriety in calling attention to three phases of the question, which seem not to have had their due weight. They are the following:

The first has to do with the argument drawn from John Gauden’s advancement. Inasmuch as Gauden possessed no acknowledged merit, either intellectual, spiritual, or administrative, which should suffice to explain his sudden rise in his profession, it has been

inferred that his advancement must be due to a grateful recognition, on the part of Charles II., of his services in writing the *Icon*. It is true that Gauden was made a Doctor of Divinity, and created Bishop of Exeter, within six months after the Restoration, and, when he complained of the poverty of his See, was soon afterward translated to the richer See of Worcester; but the inference is irrelevant. This is not reasoning, but conjecture; or if reasoning it be, it is the same impertinent reasoning that sent Galileo to prison in order to refute his theory of the earth's motion, and re-established the validity of indulgences by burning Huss at the stake.

The second point concerns the title. This name, *Icon Basiliike*, might easily enough have been suggested to the King's mind by the title of his father's work. *Basilikon Doron*, which was his first manual of royal instruction; but would with less likelihood occur to another. What would be natural and familiar to Charles himself, would seem awkward and presumptuous in an obscure clergyman; in the mind of the King there would be a filial propriety in the title, the usurpation of it by Gauden would be grotesque. But Charles was still living, and still King, when these chapters were penned, and his adherents could not yet anticipate his execution. In fact, few looked for such a termination as death at the headsman's hands, and all England was struck into the sudden torpor of bewilderment by the verdict of the Parliament. Is it likely that an unknown preacher, of a despised sect,¹ and too humble in station

¹ Green says that Gauden was a Presbyterian, and the hostility existing at that time between this sect and the Church of England, would of course have excluded a Presbyterian minister from access to the King.

Charles himself, in some verses which he wrote while he was imprisoned in Carisbrook Castle in 1648, uttered his thought freely:

even to approach the antechamber of the royal apartments, would have presumed to enter the very inmost recesses of the King's conscience, and to lay bare that dread treasury of remorse, of hope, of piety, and of forgiveness? A strange confirmation of this probability was given some years later. Charles II. reigned from 1660 to 1685. He had long since been received into the Roman Church, and died under her ministrations. His brother, James II., was an open and avowed member of that communion. After Charles II.'s death, James II. wrote an apology for his brother's apostasy. This book I have never been able to find. Nor perhaps has it any interest beyond its title. He called it *Icon Basilike Deutera*, as if it were a sequel to the *Icon Basilike*. But if the *Icon Basilike* were the work of John Gauden, the legitimacy of the *Deutera* was obviously spurious.

James II. and his brother both affirmed that their father wrote the *Icon Basilike*, and they must have had better foundation for their belief than those who attacked its authenticity. Their direct evidence, however, the partial character of these remarks refuses to consider, as well as the equally direct and almost violent pretensions that Dr. Gauden adduced in his own behalf. What is at present intended is a consideration merely of the three propositions that I have outlined above. This second point seems to have much conjectural value. James II. would never have descended to dignify by his recognition the title of a book, however meritorious in itself, that had been written by one who was in his eyes a hated heretic. He

"The Presbyter and Independent seed
Springs with broad blades. To make Religion bleed,
Herod and Pontius Pilate are agreed."

must have considered the descent of the *Icon Basilike Deutera* to be without blemish. No direct and merely verbal testimony could be as strong as his adoption of the title of his father's work as the basis of his own. James II. could not have borrowed the title of his book from Dr. Gauden.

The third point consists in a comparison of the *Icon Basilike* with "passages from the works of Dr. Gauden which are known to be his." Hume suggests this consideration without laying the subject before his readers for their own inspection. This inspection he had himself apparently made, and he concludes that there is a greater probability that Charles I. wrote the *Icon* than that Gauden composed it.

On November 29, 1640, John Gauden, "Bachelor in Divinity," preached a sermon before the Honorable House of Commons on "The Love of Truth." I take no notice of the numerous divisions and subdivisions of the text, nor to the merely verbal quibbles that were usual in the sermons of that day, except to remark their absence from the pages of the *Icon Basilike*.

First, of Truth. That question of Pilate's will here be made, "What is Truth?" I answer. It is a conformity, agreeableness, or answerableness of our minds or things to their Ideas, patterns, rules, or measures. As that Copy is true which agrees with the original, that weight or measure true which fits the standard, that impression true in wax or paper which exactly fits the types and engravings; that notion or perception true in the mind or sense, which agrees with the nature of the thing or object, where they are applied.

This is not just what one would expect of a Presbyterian minister. Truth seems, according to Gauden,

to consist in conformity, which is equivalent to truth only in the minds of the Establishment.

He also wrote a *Discourse on Artificial Beauty*, from the Xth chapter of which the following is taken:

Painting the Face very scandalous and so unlawful.

But (good madam) suppose Artificial Beautifying of the face be not in itself absolutely unlawful, but may in some countries and some cases be used by some persons privately and soberly, without the confidence of sinning against God; yet what shall we say to the Scandal and offense it gives when known to many zealous Preachers and Professors here in England, whose spirits are much grieved and offended if they do but suspect (how much more if they palpably discern?) any Lady or Gentlewoman professing godliness to use any paint or tincture to help their complexions? Ought not (I beseech you) all worthy women therefore to abstain wholly from it, because it is a thing prone to grieve the spirits of good people, although they do not think it absolutely a sin? Is it not better to want a little color in the cheeks than to damp God's spirit in any one's heart, or to offend one of those little ones, as Christ speaks, by abating that good hope and joy they had in our graces?

But Gauden's style might improve in a few years? Well, on January 10, 1648 (O.S.), which was just twenty days before the death of the King, and seventeen days before the sentence of death was imposed, Mr. Gauden caused to be printed by Richard Royston, a pamphlet entitled, *A Religious and Loyal Protestation*, which he had already, on January 5th of the same year, sent to Lord Fairfax and to the General Council of War. I do not find that this work was ever reprinted. In the address, "To the Reader," he says:

Indeed, I am persuaded that God requires and looks for (in the general over-awings of men's spirits, who behold the Army more with terror than with love and charity, which I do not) some men speedily to assert both his righteousness and their own uprightness amidst and against the crooked and perverse motions of others, in this untoward Generation which is ready to father upon God and the Christian Reformed Religion, one of the most adulterous, depraved, and prodigious issues, that ever the corrupt hearts of the men of this world conceived, their unbridled power brought forth, or the Sun beheld.

Can you see any improvement? Is all this anything but cant and whine and bombast? By the side of Gauden, the style of Cromwell becomes a miracle of seraphic clarity. Later, on page 8, in alluding to the fear now beginning to be entertained that the King's blood would be shed, he continues:

That I may at last, as Joseph of Arimathea, keep myself unspotted from it, whose voice cannot but cry as much louder than any other man's unjustly shed; as the blood of Adam would have done if Cain had slain him being his father, instead of Abel his brother.

And this uncouth Roundhead was the man whom Charles chose, out of all the men in England, to champion the sacred cause of royalty when he himself was gone, and to justify his memory to his people, and he even went into the camp of his enemies to find him. Gauden's horror over the King's death was very general among the Independents and Presbyterians,—Lord Fairfax, even, withdrawing his hand before the blow fell.

Such is John Gauden. He seems to have gone over to the Anglican Church when it became, at the Restora-

tion, the avenue to preferment. He was made bishop by Charles II., but in what manner he obtained the favor of that erotic monarch, it is well to ignore.

The author of the *Icon Basilike* chose for the motto of the book that noble sentiment which Plutarch puts into the mouth of Alexander the Great: "It becomes a king well to do good to others and to be evil spoken of." "*Bona agere, mala pati, regium est.*"

Chapter II. is a searching self-examination of his motive in signing the warrant for Strafford's death in 1641.

Chapter III. avows his reasons for going to the Commons on the third of January, 1642, and demanding the arrest of the five members.

Chapter V. treats of the advantage of triennial parliaments.

Chapter VII. gives the reasons for the Queen's departure from England.

Chapter IX. contains these words:

I find that I am at the same point and posture I was when they forced me to leave Whitehall; what Tumults could not do, an army must; which is but Tumults listed and enrolled in a better order but to as bad an end. My recess hath given them confidence that I may be conquered. And so I easily may, as to any outward strength which, God knows, is little or none at all. But I have a soul invincible through God's grace enabling me. Here I am sure to be a conqueror, if God will give me such a measure of constancy as to fear Him more than men, and to love the inward peace of my conscience before any outward tranquillity.

Chapter XXIII. was written at the time when the Scots gave him over to the English and he was imprisoned in Holmby House. He writes:

What they call obstinacy, I know God accounts honest constancy, from which reason and religion as well as honor, forbid me to recede.

'Tis evident now, that it was not evil counsellors with me, but a good conscience in me, which hath been fought against; nor did they ever intend to bring me to my parliament, till they had brought my mind to their obedience.

Should I grant what some men desire, I should be such as they wish me; not more a king, and far less both man and Christian.

What tumults and armies could not obtain, neither shall restraint; which though it have as little of safety to a prince, yet it hath not more of danger.

The fear of men shall never be my snare, nor shall the love of liberty entangle my soul; better others betray me than myself, and that the price of my liberty should be my conscience. The greatest injuries my enemies seek to inflict upon me cannot be without my own consent.

Neither liberty nor life are so dear to me as the peace of my conscience, the honor of my crowns, and the welfare of my people; which my word may injure more than any war can do, while I gratify a few to oppress all.

The laws will by God's blessing revive, with the love and loyalty of my subjects, if I bury them not by my consent, and cover them in that grave of dishonor and injustice which some men's violence hath digged for them.

If my captivity or death must be the price of their redemption, I grudge not to pay it. No condition can make a king miserable, which carries not with it his soul's, his people's and prosperity's thraldom.

In the XXVIIth chapter, "To the Prince of Wales," the following occurs:

It is all I have now left me, a power to forgive those that have deprived me of all; and I thank God I have a heart to do it, and joy as much in this grace which God hath given

me as in all my former enjoyments; for this is a greater argument of God's love to me, than any prosperity can be. Be confident, as I am, that the most of all sides who have done amiss, have done so not out of malice, but misinformation or misapprehension of things.

Later still, in the "Meditations upon Death," he says:

It is God's indulgence which gives me the space, but man's cruelty that gives me the sad occasions for these thoughts.

I am not so old as to be weary of life, nor, I hope, so bad as to be either afraid to die or ashamed to live. True, I am so afflicted as might make me sometimes even desire to die, if I did not consider that it is the greatest glory of a Christian's life to die daily, in conquering by a lively faith and patient hopes of a better life, those partial and quotidian deaths which kill us as it were by piecemeal, and make us over-live our own fates.

And as to the last event, I may seem to owe more to my enemies than to my friends; since those would put a period to the sins and sorrows attending this miserable life, where-with these desire I might still contend.

These passages are taken almost at random from the *Icon Basilike*. The rest is as fine as what has been quoted. Of Sir Thomas Browne's *Religio Medici*, which had been published in 1642, Coleridge said, "The style is throughout delicious"; in 1644, Milton's magnificent oration for the freedom of the Press was produced; and yet Hume, speaking of the *Icon Basilike*, says: "It must be acknowledged to be the best prose composition which, at the time of its publication, was to be found in the English language." I wish I had space to copy at least the last prayer in the *Icon*, but the whole book is in perfect harmony with the dignity and submission of its royal author,

"Who nothing common did or mean
Upon that memorable scene."

Thus we have endeavored to develop and sustain the countertheme to Burton's proposition, "that kings build cities, not poems," and may justly infer that, among all who have pursued literature as an avocation, few classes of mankind have done more for letters than kings—whether on the throne or in prison. Indeed, speaking generally, more and better literary work has been done in prison, exile, and slavery than on the throne, and many a poet's progress has been through Bedford jail. Terence, Epictetus, Phædrus, were slaves; Horace's father was a slave; Æsop, himself a fable, has been fabled to be a slave. Cervantes, one of the noblest of men, wrote a part of *Don Quixote* while in prison in Algiers, as he himself seems to imply and as Avellaneda expressly affirms. Jean Paul says, "The prisoner's allowance is bread and water, and I had often only the latter." For over three hundred years, Portugal has blushed to remember that Camoens died a beggar, in Lisbon. So did Guillen de Castro, and was buried by charity. Silvio Pellico even wrote a book, *Le Mie Prigione*, on the various prisons in which he had passed many years of his life. Sir Richard Baker wrote his *Chronicle* in the Fleet, where also Howell composed most of his "Letters." Sir Walter Raleigh's *History of the World* was written in the Tower, under the shadow of death. "It was in poverty, blindness, disgrace, danger, and old age," says Hume, "that Milton composed his *Paradise Lost*." Any one may, from his own reading, make a list for himself, which will begin with Homer, and end with *The Ballad of Reading Gaol*. Dante wrote in prison—for what is exile but a larger

ward?—Ovid, Seneca, Boëthius, Locke, and how many beside?

How poverty, sickness, and misfortune mellow the heart! Swift says, with a sad irony, that an author, like a limbeck, will yield the better for having a rag about him. Sweet are the uses of adversity. There seems to be something paltry in the quest of power and riches, when one contemplates the benefits that humanity has derived from misery, poverty, and shame. Perhaps every life, whether it be passed on the throne or in the street, may be properly considered a failure if it succeed only as regards itself. Misfortune seems to have brought forth nobler fruit than prosperity. It may be that suffering is a higher state than happiness, and that sorrow is nearer to the universal purpose than pleasure. While the state and power of a king isolate him from mankind, his suffering and degradation bring him within the reach of sympathy and call forth the spontaneous compassion of humanity. In this lies the appeal of the *Icon Basiliæ*; to this must be referred much of the interest that royalty excites when, for a while, it abdicates the throne, and steps aside to enter the arena of letters.

VI

ON THE INHERENT SPIRIT OF MEDICINE

THERE seems to exist in the minds of people in general, a misconception of the dignity and purpose of medicine. We have heard much of late years about mercenary medicine, and the charge is found on investigation to be hoary with antiquity. Yet it seems that physicians as a body have been little careful to correct this error, in some cases have silently acknowledged its truth, and indeed in a few instances have apparently adopted it as a rule of professional conduct, which has further emphasized its prevalence in the minds of the laity. I have recently come across an item in a medical journal, which is especially illustrative of the virulence of this charge. In a casual clipping, the journal I speak of reports the following scholarly invective, as uttered from a pulpit in a neighboring city:

It is not a profession, it is a trade that the doctors ply to-day. It is not the practitioner of a profession who goes into a household and demands his fee of \$500 or \$1000 before he will apply the knife to the cancer, the anesthetic to the wound. Such practices ought to be condemned from every pulpit—every rostrum in the land. The government ought to step in and prevent them.

I am myself of the opinion that to apply the anesthetic to the wound is not good surgery, and I am

convinced that such coarse accusations as these the profession of medicine throws aside like dewdrops from the lion's mane, yet underneath this vulgar and slovenly violence lurks a manifest malice which wilfully misrepresents the inherent spirit of medicine, and which, with less bitterness and better taste, prevails widely among men intelligent enough to comprehend their error when it is made apparent to them, and just enough to yield recognition to the truth when once that truth is vindicated.

I am conscious that there would be a certain presumption in my venturing to give form to thoughts that must often have come vaguely into the minds of many thinking men, were it not that while the utterance of these thoughts may be imperfect, yet it seems best that some form should be given to them, and that the beneficent purpose, the great achievements, and the magnanimous spirit of our calling should be impressed upon the minds of those who have never carefully considered what the profession of medicine really is, and thus elevate their appreciation of the work we do and the ends we serve.

If the practice of medicine were, like other occupations, prosecuted for the sake of money, how many and how great opportunities for enrichment occur, may be conjectured by an estimate of the amount of money that Von Behring, for example, might have demanded for the use of the diphtheria antitoxin. The history of medicine is unfortunately not absolutely free from instances where the desire for gain has blinded physicians to any higher purpose. In the early part of the seventeenth century, the obstetric forceps, one of the most useful of all instruments, was invented by Peter Chamberlain, of London, but was kept as a family

secret for many years for private gain. The use of this instrument was restricted to his sons and a few other persons, as Dr. Davis tells us, who also were pledged to secrecy. Nearly a century afterwards, in 1721, Palfyn invented a similar but less perfect instrument, and exhibited it before the Paris Académie des Sciences as something perfectly new, so well had Chamberlain's secret been kept. Gerrard, in his *Strafford's Letters*, says under the year 1634:

Dr. Chamberlayne, the man midwife, endeavored to erect a lecture of midwifery, which he would have read in his house to the licensed midwives of London, for which he was to have one shilling for every child born in the city and suburbs of London; other conditions he subjoined to this, as bargaining beforehand for his fees in cases of necessity—(I presume he meant "of destitution,") but it would receive no passage from the Bishop of London, who licenses all the midwives of London, nor yet from the College of Physicians.

It is an evidence of the prevalent spirit of the profession that this case stands out as such a rarity in medical annals. The absence of cupidity among physicians is the more remarkable since the assumption of their duties is in no way restricted to selected aspirants. Young men, with no regard to fitness, embark upon its study from diverse and often from unworthy, or at least uncertain, motives, yet the inherent spirit of medicine at length influences their lives and elevates their aims in life.

Those misguided individuals have a very distorted conception of the spirit of medicine who have clamored for legislative enactments which would give to physicians the right to terminate by anticipation the lives

of patients afflicted with incurable diseases; for the time can never arrive, so long as medicine continues to be a profession, when to the other duties of the physician will be added that of serving, under any conceivable circumstances, as public executioner.

So little is the beneficent purpose of medicine understood, that the profession encounters some of its most determined opposition among the very persons whom it endeavors to protect from disease. To an unprejudiced observer nothing can be more certain than that vaccination secures immunity from smallpox, yet, with an effrontery perhaps unparalleled in the history of illogical vagaries, there is in existence an active association whose purpose is to prevent vaccination. If these people were not destitute of intelligence, they would shrink appalled from the consequences that would follow the success of their nefarious propaganda. More recently, another society has been revived, that of the anti-vivisectionists, which, encouraged by the notoriety that the opponents of vaccination have achieved, has presumed to obstruct the progress of preventive medicine by an appeal to hysterical sentimentalism. The one seeks to obliterate the record of the past, the other strives to close the door to the future; both are interesting studies in mental obliquity.

The study of medicine is an entrancing subject; its practice requires an array of virtues whose mere contemplation staggers the mind. One must meet violence with gentleness, ingratitude with equanimity, insult with fortitude, slander with silence. The physician's life is a daily exemplification of the Golden Rule. The very sensitiveness that inspires sympathy with pain and misery is a weapon in the hands of ignorance and malice wherewith they deal dreadful wounds, wounds which

must be endured silently. Resentment can have no place in the physician's mind. Equanimity must be maintained in the face of misapprehension and abuse.

Those physicians who practice medicine for their fees only have missed the spirit of their profession. They are hucksters and tradesmen. Among them are those who advertise their cures, who magnify their skill, who vaunt their knowledge, who promise things beyond their ken, who affect an overpowering dignity of deportment, and who exact the uttermost farthing. These are they who gain repute by disparaging their colleagues, who increase their clientele by indulging in a covert sneer at their fellow practitioners, by discrediting their diagnoses and by criticizing their treatment. There are many insidious methods of assailing and even of destroying the reputation of others. Of these unworthy members of the profession I have no wish to speak save by a passing word. Men with paltry aims, selfish lives, and ignoble minds may be found among all classes and in all callings. To those who feel and appreciate the sacred duties and the lofty responsibilities of the profession, these sordid souls are a source of wonder as well as of pity.

There seems a degrading impropriety in recognizing any possible emulation between medicine and its unworthy parasites and imitators. In several of the States there has been an annual struggle in the Legislature to obtain for osteopathy kindred recognition to that which the laws secure to the practice of medicine. Christian Science has spread, of which specious travesty of religion and medicine one may say, almost in the words of Voltaire's comment on the title of the "Holy Roman Empire," that it is neither Christian in its spirit nor scientific in its method. The discredited

theories of Hahnemann still find a name if not a place in current speech, and optometrists have in several States been permitted to conceal their incompetence under the cloak of legislative sanction. To grosser quacks, to lower depths of pretense and fraud, to cancer-cures, to hypnotists, to abortion-mongers, to venereal quacks, I shall not so much as allude. Even their names are an offense.

Rather would I speak of those unselfish men who look upon deformity with gentle eyes and reach out to misery a helping hand; whom dirt and disease and danger cannot divert from the path of duty; to whose sympathy the cure of disease appeals as strongly as the pleasures of sense appeal to other men; physicians who, in their sacred mission, alleviate pain, comfort the distressed, encourage the hopeless, and uplift the degraded victims of sensuality and crime. All the world honors those noble men whose undaunted fortitude demonstrated the non-infectious character of yellow fever; yet they only presented on a larger stage the great principles that govern and actuate the daily conduct of the average physician. Heroism is not noted as it goes modestly on its daily rounds and performs its simple duties.

There seems to the unreflecting mind something repulsive and almost ignoble in ministering patiently to sufferers from loathsome diseases. There is a legend of St. Francis, one of the greatest of recorded men, upon which his biographers dwell with admiration, wherein he is represented as for a time devoting himself to the care of lepers, living with them, washing their sores, and gently ministering to their needs. Well, are not tuberculosis and diphtheria and yellow fever as fatal as leprosy? Yet a service that crowns Francis with a halo of sanctity and sets him apart as especially holy,

fails to excite a word of admiration when it is performed daily for many years by those among us who devote their lives to such service. There is no vainglory in signalizing the devoted and modest heroism that characterizes the daily lives of physicians. Perhaps it is the greatest glory of our profession, that such devotion is looked upon by the laity as usual and customary, as such an essential part of our duties, so naturally expected from us and so constantly performed, that it no longer excites comment.

An illustrious example of equanimity maintained in the face of misapprehension may be found, where so many admirable illustrations of virtue are found, in Plutarch. It happened that while Alexander the Great was in Cilicia, a short time before the great battle of Issus, he became suddenly ill after bathing in the icy waters of the Cydnus. None of his physicians dared to treat him until Philip, a physician from Acarnania, who also attended him, ventured to take the responsibility of caring for him. The extent of this responsibility may be recognized from the fact that when Hephestion died of fever at Ecbatana, the physician who attended him was crucified because his patient died. At the time when Philip assumed the charge of his illustrious patient, Parmenio wrote to Alexander to beware of Philip, for he had been bribed by Darius to kill him, and the reward that he was to receive was stated. Alexander, after reading the letter, put it under his pillow, and, Philip coming in with a draught that he had prepared, he took the cup in one hand and with the other gave Philip the letter to read, so that while Philip was reading the accusation of Parmenio, Alexander was drinking the medicine that Philip had brought him. One knows not whether to admire most the

magnanimity of Alexander, or the equanimity of Philip, but both were suitably rewarded, for the illustrious patient, fortunately for Philip, recovered. One hesitates to conjecture what would have befallen Philip if Alexander had died.

It was not an unusual thing for the physician to face death when his patient died, for there was even a law in Egypt by which the physician after the third day was obliged to assume the risk of his patient's death; in which event the state avenged the patient's misfortune on the head of the physician.

These risks, fortunately for us, no longer hang over the doctor's head, but from others, no less real, we cannot escape. Everyone knows the danger that surrounds the willing ministrations of physicians. Two young physicians of my acquaintance have, within the last five years, caught tuberculosis from their patients. Their pathetic fate, scarcely even among their friends, scarcely even among their patients, excited a casual word of sympathy; and yet less deserving men have had altars erected to them. Among my intimate professional friends, I know of three who contracted an infectious disease from their patients, and all three have died. I am sure that men have been canonized for a service that was less heroic.

In the hagiography of the Catholic Church we read of a holy bishop who was after his death enrolled among the saints, whose only recorded miracle is the following:

And on a time there came a woman over the bridge with her lap full of eggs, and a reckless fellow struggled and wrestled with her and brake all her eggs. And it happened that the holy bishop came that way the same time and bade the woman let him see her eggs, and anon he lift up his

hand and blessed the eggs and they were made whole and sound, ever each one, by the merits of this holy bishop, and being then glad she thanked God and this holy man for the miracle that was done to her.

Which, think you, was greater—this holy Bishop of Winchester, or my three friends who met death as a reward for their devotion to patients afflicted with a loathsome disease?

The physicians who have met death from diphtheria, from smallpox, from tuberculosis, in the heroic discharge of duties so common as to seem trivial, cannot be computed. Time has failed to keep a record of the noble dead. A roster of their honored names is out of our power. Obscure heroes, who have fallen in the strife for humanity, fill our churchyards, where they sleep in unacknowledged graves. St. Paul boasted that he was a citizen of no mean city. We may boast in the same spirit that we belong to no mean profession, to no ignoble calling; and, while ungrateful beneficiaries may accuse us of practicing medicine for money, we may be sure that alike in city and in country, alike among the homes of wealth and the hovels of destitution, there exists a great body of men who by unselfishness, by fortitude, by kindness and charity, sustain amply the traditions and fulfill worthily the scope of our noble calling. To those men what is a money fee? It is not time and study and care alone that they offer to the afflicted. It is their own strength, their sleep, their very lives that they lavish upon them, and what is a fee in exchange? Do men sell their blood for gold?

I am making no exhaustive compilation of the benefits that physicians have conferred on humanity. The record is open for all to read. One has not to grope and

delve to find it. It was estimated that Spencer Wells, in one series of ovariotomies, had added 20,000 years of life to the patients on whom he operated. Is that not raising the dead to life? For even those who were raised from death by Christ and His disciples were not thereby rendered immortal. To raise one from the dead was merely to add a few years to his life. Speaking with due humility, we may say that there is no member of our profession who has not done as much, and many have done far more. Before the discovery of vaccination 3,500,000 people died of smallpox in a year in Mexico. In British India in the year 1770, 3,000,000 died of the same disease, while in Europe the death-rate from this one disease alone averaged 200,000 a year for 1000 years. To-day it is almost a rarity. Since the introduction of compulsory vaccination into Germany, smallpox has practically disappeared from that country, while in the United States it is not probable that one physician in one hundred has ever seen a case.

Who can compute the benefit of a century of vaccination? Reckon, if you can, the saving of human life from the time when hygiene and sanitation expelled the Black Death from Christendom—but first read Boccaccio's account of the plague at Florence and Daniel Defoe's narrative of the Great Plague of London, and you will not need statistics to appal you. By how much has Von Behring shorn diphtheria of its fatal horror, and who can estimate the conservation of life due to diphtheria antitoxin? We are all witnesses to the general apathy shown among the laity toward the extermination of tuberculosis, and I have seen more than one article in the daily press imputing to Robert Koch other than humanitarian motives, and roundly

ridiculing him for his expressed doubt as to the transmissibility of bovine tuberculosis to man, as if by that doubt he had also thrown discredit on his previous labors. It is a curious fact that almost all human incentives to action are due to mixed motives, and the more complex our lives become, the less frequently do simple motives as springs to action determine our conduct, so that any decision is in reality a resultant of forces. It may be that often the benefit of humanity is at times less consciously active than the desire for reputation, or social and professional standing, or popular favor, or some other even less elevated aim, but nevertheless even if we are personally unconscious of this as a constant determining factor in our lives, we cannot wholly withdraw ourselves from the influence and spirit of our calling.

It is but a few years since tuberculosis was regarded as inevitably fatal. The belief in this fatality was rather the cause of Keats's death than the article in the *Quarterly* to which Byron ascribed it. Keats had a slight hemorrhage. He called for a candle and examined the sputum. Then he sank back upon the pillow exclaiming, "That is my death-warrant. I must die." He gave up hope at once. In Keats's day the death-rate from tuberculosis was very high; for every 10,000 of population there were forty deaths annually from this disease, whereas to-day there are only eleven. It would, of course, be too much to say that this vast improvement is due entirely to a better knowledge of the disease, or to improved methods of treatment, since before the year 1882, when Koch discovered the bacillus of tuberculosis, the death-rate had already begun to abate. Much is probably due to a modification of the disease itself. Whatever the cause, however, there is

reason to believe that its rapid diminution, both in prevalence and in fatality, means its speedy elimination from mortuary statistics. It is apparently destined, at least in Dr. Bulstrode's opinion, to become, in another generation, if not entirely extinct, at least as infrequent as typhus fever or leprosy.

Moreover, that is the end to which all the recent advances in medicine are purposely tending—to the eradication of contagious disease. Prophylaxis has become the motto of medicine. The physician is consciously laboring for his own elimination as an economic factor. He is cutting away his own props, he is giving away with open hands his own fields and forests to benefit humanity. This is the inherent spirit of medicine.

Thackeray has a sketch, in one of his *Roundabout Papers*, that each of us may easily parallel from his personal observation.

About two years since, there was, in our or some other city, a famous doctor, into whose consulting room crowds came daily, so that they might be healed. Now this doctor had a suspicion that there was something vitally wrong with himself, and he went to consult another famous physician at Dublin, or, it maybe, at Edinburgh. And he of Edinburgh punched his comrade's sides, and listened at his heart and lungs, and felt his pulse, I suppose, and looked at his tongue. And when he had done, Doctor London said to Doctor Edinburgh, "Doctor, how long have I to live?" And Doctor Edinburgh said to Doctor London, "Doctor, you may last a year."

Then Doctor London came home, knowing that what Doctor Edinburgh had said was true. And he made up his accounts, with man and Heaven, I trust. And he visited his patients as usual. And he went about healing and cheering and soothing and doctoring; and thousands of sick people

were benefited by him. And he said not a word to his family at home, but lived among them cheerful, and tender, and calm, and loving, though he knew the night was at hand when he should see them and work for them no more.

And it was winter time, and they came and told him that some man at a distance was very sick and wanted him; and though Doctor London knew that he was himself at death's door, he went to the sick man. And the doctor died, and his family never knew until he was gone, that he had been long aware of the inevitable doom.

There seemed to Thackeray something peculiarly noble in this pathetic incident, but there has never been a time, at least since the days of Boerhaave, when physicians of this type have not abounded in the world.

A physician's duties often surpass his professional boundaries. As Sir Thomas Browne finely said, his circle is more than 360 degrees. Disease is not the only thing he has to cure. The sorrowful confessions that he receives, the domestic tragedies that he prevents, the broken hearts that he soothes, the ruined lives that he restores to rectitude, who can enumerate? How memories throng upon the mind when we dwell a moment upon these things! There is something peculiarly tender and holy in these services, and a physician must be not only a good man but a wise one, to direct his patient's feet out of the path of calamity and sin, and into the path of life in its fullest meaning. It has been well said that a physician's hands should be as clean as those of the priest who officiates at the altar.

“ Above all price of wealth
The Body’s jewel,—not for minds profane
Or hands, to tamper with in practice vain—
Like to a woman’s virtue is man’s health,

A heavenly gift within a holy shrine;
To be approached and touched with serious fear,
By hands made pure and hearts of faith severe,
Even as the priesthood of the One Divine."

These are a few of the innumerable glories of the profession of medicine. The achievements that I have mentioned are those of four or five physicians. I cannot speak in detail of Morton, and the discovery of general anesthesia; of Lister, under whose teaching septic surgery was forever abolished; of Pasteur, who instituted the science of bacteriology. These are a part of the heritage which to some extent we all share, that has descended to us and will be transmitted to our successors. This is our birthright. When we contemplate these things, who would not be proud to be associated with the men I have named, to be a colleague of Sydenham and Haller and Boerhaave and Virchow and Pasteur? It is not given to us all to equal their achievements or to rival their renown, but we can at least keep our own lives pure, our own ideals intact, our own honor blameless, that through us the profession of medicine, like the ancient Roman Republic, *ne quid detrimenti capiat*, may sustain no harm.

VII

SOME TRANSLATIONS OF HORACE

IN 1753, just before the publication of Dr. Johnson's *Dictionary* raised him to the well-merited eminence of literary dictator in England, there came up to London, from Cambridge, a gentleman whose arrival gave great satisfaction to the men of letters of the capital, for the name of Christopher Smart was already well-known and much admired among scholars. Ten years earlier and while yet an undergraduate, he had translated *The Ode on Saint Cecilia's Day* into Latin, and received the warm thanks of the author, the great Mr. Pope, who was so well-pleased with the performance of the young student that he wrote him a letter requesting him to do the same service to the *Essay on Criticism*. This also Mr. Smart did, though he himself reaped no pecuniary benefit from it. In 1745, the year after Pope's death, he became a Fellow of Pembroke College and in 1747 he took his M.A. degree there. He chose no profession nor studied for any, intending to earn a living by literary work, which was to say, considering the times, that he expected to live by his wits.

Certainly, his prospects were brighter and his acknowledged attainments higher than had been the case with any of the circle of famous men who greeted him on his arrival in London. He was in receipt of an annual allowance of £200 from the Duchess of Cleveland, and

soon afterward the Government allowed him a pension of £50 a year. Both of these, amounting to \$1250 annually, were paid to him during life. From his father I do not learn that he continued to receive any addition to his income, nor is it probable that his wife, whom he married the year he left Cambridge, brought anything as her dowry.

In London, he became quickly intimate with all who were eminent either for genius or for learning. Johnson, especially, welcomed him warmly; Garrick showed his friendship by giving him a benefit at the Drury Lane Theatre, and Smart quickly settled down to serious work. He translated the fables of Phædrus into English verse; he wrote some plays that received more applause than they merited, and in 1756 he brought out his prose translation of Horace, for which the publishers paid him \$500. This seems, perhaps, a small return for such a work, but it was a large sum for the times. The reading public was not extensive, and the immediate sale of learned books was slow and very limited. Yet it was ten times as much as Johnson had himself received for any of his poetical works. Goldsmith received but \$300 for *The Vicar of Wakefield*, and when his publisher gave him \$500 for *The Deserted Village*, he exclaimed that no poem could ever be worth such an enormous sum and wished to return a part of it. Moreover, if the decrease in the purchasing value of money be considered, the sum even to-day will not seem a trifling one. But Smart was so careless of money, he was so heedless of the obligations that are imposed by its use, and so impatient under the penalties that are exacted by its neglect, that his affairs were in a condition of constant and hopeless embarrassment. So, to avoid perplexity, he incurred ruin, and, to escape dis-

comfort, he found himself in a "madhouse," as they very properly named the asylums for the insane in the middle of the eighteenth century. Charles Reade has described, in *Hard Cash*, the condition of such institutions a hundred years later, when the spirit of humanity had already somewhat mitigated their severity. We will not follow Smart into his retreat; the way in which he qualified himself for it alone engages us. Few stranger stories are recorded in the annals of literature.

The prose translation of Horace was published in 1756. But the price paid for it seemed to him so meager, in comparison with his inordinate expectation, that he fell into a despondency that verged upon despair. It is probable that his eccentricities neither then, nor at any subsequent time, warranted the diagnosis of insanity, but soon afterward, in the expectation of assuring his future, he fell into the merciless clutches of the unscrupulous Gardiner, from which not even the incarceration in a madhouse, which resulted from the acquaintance, could avail to extricate him. Still the first step seemed innocent enough. He engaged to write a monthly paper for *The Universal Visitor*.

The periodical essays of the eighteenth century had, doubtless, more effect in smoothing the asperities of English manners, in inculcating gentleness and modesty, in "teaching the minor delicacies and inferior duties," and in establishing good taste and propriety of conversation in place of the awkwardness and indelicacy that had up to that time disfigured current speech and behavior in England, than all the works on virtue, philosophy, and morality that had ever been published. To read these delightful essays, enlivened by delicate wit and gentle humor, was to pursue a practical course in minor ethics. They were universally read, and,

under their genial influence, English manners changed visibly for the better during the century, an improvement that may be reasonably ascribed in great part to their influence. Their origin is sufficiently interesting to detain us for a moment.

In 1703, a satire was published by a Mr. Foe, entitled *The Shortest Way with the Dissenters*, for writing which the author was sentenced to be fined, to stand for three days in the pillory, and to be imprisoned "during the Queen's pleasure." The next year, apparently, the Queen's pleasure came to an end, for Mr. Foe was enlarged from prison. He came out a new man. He went in as Mr. Foe, he came out as Mr. Defoe, and lived to write a circumstantial romance on *The Great Plague* and a narrative of Robinson Crusoe, besides many other books. Our present interest in him at this period of his life centers in the fact that while in prison he projected the *Review*, which appeared at first weekly, then twice a week, then thrice weekly, and was written much on the model of Roger L'Estrange's series of political tracts that were issued during the preceding century, under the name of the *Observator*. This was in 1704.

Five years later, in 1709, Steele chose the same form for his *Tatler*, and on March 1, 1711, appeared the first number of the *Spectator*, which Steele regarded as a monument to the friendship between himself and Addison. On December 6, 1712, the *Spectator* came to an end, and the next year the same writers started the *Guardian*. Of the *Tatler*, 274 numbers were published; of the *Spectator*, 555; and of the *Guardian*, 176. These were the most famous members of an immense family of similar enterprises which furnished entertainment to London society. Fielding wrote the *True Patriot*, which

ran from November, 1745, to June, 1746, the *Champion*, and several others; Johnson followed the same path with the *Rambler* in 1750 and the *Idler* in 1758; Dr. Smollett founded the *Critical Review* in 1767, and the series culminated in 1802 in the establishment of the *Edinburgh Review*, the only one that has endured without an intermission to our own time.

The success of some of these journals was immense. Hundreds of them sprang up like the seed that fell upon stony places and soon withered away because they had no deepness of earth; but the *Tatler*, the *Spectator*, the *Guardian*, and a few others, are of perennial interest and of enduring value, containing some of the most delightful essays, poems, and reviews that were ever written. A somewhat similar demand has been appeased within recent years by the multiplication of monthly magazines, whose number and whose charm recall the journals of the eighteenth century, while confessing their inferiority to their prototypes both in purpose and in literary finish.

It was during the period of these journals that Gardiner, the bookseller, conceived the unhappy project of adding to their number by the monthly publication of *The Universal Visitor*, and, as ill-luck would have it, he fastened upon Christopher Smart to fill his pages for him. In this enterprise, Smart was associated with a Mr. Rolt, a gentleman otherwise unknown, and they were to receive and divide between them the third part of the profits arising from the venture. So far, so good. If the contract had ended here, Smart might at least have kept out of the madhouse. But, unfortunately, Gardiner added a clause to the contract, by which Smart bound himself "not to write for any other publication for an ensuing term of ninety-nine years."

Rolt probably signed the same agreement and bound himself by a like obligation, but for Rolt nobody cares. This surely was one of the strangest bargains that ever avarice extorted from despair.

What could move the rapacious publisher to draw the lease for this monstrous term of years [says De Quincey] we cannot conjecture. Surely the villain might have been content with threescore years and ten. But think of poor Smart, two years after, upon another publisher applying to him vainly for contributions, and angrily demanding what possible objection could be made to offers so liberal, being reduced to answer, "No objection, sir, whatever, except an unexpired term of ninety-seven years yet to run?" The bookseller saw that he must not apply again in *that* century; and, in fact, Smart could no longer let himself, but must be sublet, if let at all, by the original lessee.

It never entered Smart's head to test the validity of such an outrageous contract by suing at law for a release, and he was too proud to ask the advice of any of his friends, who would gladly have assisted him in such a strait; on the contrary, he promptly proceeded to lose his mind and was for years immured in an asylum.

"I wrote for some months for the *Visitor*," says Dr. Johnson, "in the name of poor Smart, while he was mad; not then knowing the terms on which he was engaged, and thinking I was doing him a kindness. I hoped his wits would soon return to him. Mine returned to me, and I wrote for the *Visitor* no longer."

Such was Smart, the prose translator of Horace. It must be added that, while he knew little of the world, he saw less. One day a friend ex postulated with him for going about so little. "Why! I walk out every day," Smart replied. "Yes," rejoined the other, "to the ale

house; but you take good care to walk only one way." "It is true," admitted Smart, "that I let them carry me home." But the excellence of his work has discouraged imitation and daunted all later scholars. His knowledge of the Latin tongue was as intimate as his command of his own was admirable. For a century and a half, Smart has been distinguished as the prose translator of Horace.

But while the prose translation leaves little to desire and less to amend, the same can by no means be asserted of any entire metrical version that has as yet been presented to the world. Lord Lytton, Sir Philip Francis, Professor Conington, Archdeacon Wrangham, Sir Theodore Martin, and others have given us metrical versions of all the odes, and an innumerable succession of poets and scholars, from Milton to Eugene Field, have translated single poems. No ancient poet has tempted so many men to translate him and has repaid them so ill. The question to be asked, says a writer in *Blackwood*, is:

Why the Odes of Horace should be less tractable in the hands of the translators than almost any other ancient work? That they have been so is allowed on all hands. They are the opprobrium poetarum. Everybody has tried the adventure and nobody has succeeded. It is a fine paradox to puzzle the critics, who bawl so loudly for literal translations. No Latin poetry is so easy to construe, none is so plain in diction, so unambitious in sentiment, so familiar in design and subject. They by no means answer our preconceived ideas of this kind of writing. They are not Pindaric Odes. By the term "Ode" we are immediately reminded of the cloudy effusions of Collins and of Gray—lofty but obscure, magnificent but cumbrous and inflated—of a soaring and original but yet a labored and unwieldy

sublimity; high, misty, and picturesque. This is the reverse of the style of Horace.

The same writer, looking about for a reason, continues: It is the poet, in short, whom we must attempt to translate, rather than his work. We must endeavor to make his spirit live again in our own times, and to treat his matter as that spirit guided the pen. Since we cannot effect a "consubstantial," we must strive after something like a "real," presence.

But the poet and his work cannot be thus separated. To the translator, the poet is his work.

Dryden thought that the translator "should be true to his author's sense, but truer to his fame," which seems a trifle obscure. John Conington says, "The first thing at which, as it seems to me, a Horatian translator ought to aim, is some kind of metrical conformity to the original," and as the result of this judgment he gave to his verses an apparent correspondence in length to those of Horace, without any attempt to reproduce the Horatian meters themselves. This is, of course, not a "metrical conformity" at all. He has some excellent essays, of which his version of the *Vitas hinnuleo* is one of the best:

" You fly me, Chloe, as o'er trackless hills
A young fawn runs her timorous dam to find,
 When empty terror thrills
 Of woods and whispering wind.
Whether 'tis Spring's first shiver, faintly heard
Through the light leaves, or lizards in the brake
 The rustling leaves have stirred—
 Her heart, her knees, they quake.
Yet I who chase you no grim lion am,
No tiger fell to crush you in my gripe;
 Come, learn to leave your dam,
 For lover's kisses ripe."

and Lord Lytton has given us a better version of the same ode, on a similar model of apparent structural agreement:

“Like a fawn dost thou fly from me, Chloe,
 Like a fawn that astray on the hilltops
 Her shy mother misses and seeks
 Vaguely stirred by the breeze and the forest.
 Sighs the coming of Spring through the leaflets?
 Slips the green lizard stirring a bramble?
 Her knees knock together with fear,
 And her heart beats aloud in its tremor.
 Nay, but not as a merciless tiger,
 Or an African lion, I chase thee:
 Ah! cling to a mother no more
 When thy girlhood is ripe for a lover.”

but neither Mr. Conington’s iambics nor Lord Lytton’s anapests offer any resemblance to the metrical charm of Horace’s noble Asclepiadeans, Pherecrateans, and Glyconics.

Milton and Horace, when considering the diversity of human pleasures, discover a strange congruity of observation and display similar grace and urbanitas in their descriptions. When Horace sings,

“*nunc viridi membra sub arbuto
 Stratus, nunc ad aquæ lene caput sacræ*”¹—

Milton seems to complete the strain,

“the waters murmuring
 With such concert as they keep
 Entice the dewy feathered sleep.”

¹ “Reclining either under the green trees or at the peaceful source of some sacred stream.”

Horace says,

*"Multos castra juvant et lituo tubæ
Permixtus sonitus" —*

and Milton responds,

*"Towered cities please us then
And the busy hum of men."*

Horace sings,

*"manet sub Jove frigido
Venator teneræ conjugis immemor,
Seu visa est catulis cerva fidelibus,
Seu rupit teretes Marsus aper plagas" —*

and Milton answers,

*"Oft listening how the hounds and horn
Cheerly rouse the slumbering morn,
From the side of some hoar hill,
Through the high wood echoing shrill."*

In the same spirit of thorough sympathy, Milton translates the *Quis multa*, in a strain that no other translator has excelled:

*"What slender youth, bedewed with liquid odors,
Courts thee on roses in some pleasant cave,
Pyrrha? For whom bind'st thou
In wreaths thy golden hair.*

*"Plain in its neatness? O, how oft shall he
On faith and changèd gods complain, and seas
Rough with black winds, and storms
Unwonted shall admire,*

¹ "Camps please many, and the mingled notes of trumpet and clarion."

² "The huntsman, forgetful of his tender spouse, lingers in the cold night, if a hart is pursued by his faithful hounds, or a Martian boar has broken through the delicate nets."

“Who now enjoys thee, credulous, all gold,
 Who always vacant, always amiable,
 Hopes thee, of flattering gales
 Unmindful! Hapless they

“To whom thou untried seem’st fair! Me in my vowed
 Picture, the sacred wall declares to have hung
 My dank and dropping weeds
 To the stern god of sea.”

and yet the words seem in the last stanza to have been less condensed than crushed together, and “potenti maris deo” is not quite the same as “to the stern god of sea.”

Byron had something of Horace in him, and perhaps no better comparison between them can be found than Byron himself has invited in his translation of the first eight verses of the *Justum et tenacem*. Horace’s lines are,

“*Justum et tenacem propositi virum,*
Non civium ardor prava jubentium,
Non vultus instantis tyranni,
Mente quatit solida, neque Auster

“*Dux inquieti turbidus Hadriæ,*
Nec fulminantis magna manus Jovis;
Si fractus illabatur orbis
Impavidum ferient ruinæ”¹—

¹ “Not the rage of the people pressing to hurtful measures, nor the aspect of a threatening tyrant, can shake from his settled purpose a man who is just and determined in his resolution; nor can the South wind, that tumultuous ruler of the Adriatic, nor the mighty hand of thundering Jove. If a crushed world should fall in upon him, the ruins would strike him undismayed.”—SMART.

which Byron translates,

“The man of firm and steadfast soul
No factious clamors can control;
No threatening tyrant’s darkling brow
Can swerve him from his just intent;
Gales the warring waves which plow
By Auster on the billows spent,
To curb the Adriatic main,
Would awe his fix’d determined mind in vain.

“Ay, and the red right arm of Jove
Hurtling his lightnings from above,
With all his terrors there unfurled,
He would unmoved, unawed, behold,
The flames of an expiring world
Again in crushing chaos rolled,
In vast promiscuous ruin hurled,
Might light his glorious funeral pile;
Still dauntless ’mid the wreck of earth he’d smile.”

Here, Horace is received according to the recipient, and is uttered with a considerable increment of Byron. Horace says, “If a crushed world should fall in upon him, the ruins would strike him undismayed.” This simple and vigorous figure Byron has expanded into six verses. Horace uses seven words, Byron thirty-six; Horace utters a vivid trope, Byron amplifies it into a poem; Horace is restrained, Byron effusive; the one is a poet, the other an orator.

And these verses of Horace are representative of his work. You feel that there is in him as much strength as in Byron, with much more self-control. The Englishman empties his quiver, but one divines in the Roman poet kindly reticences and a restrained power. Such was the ideal of Roman culture, whose only ostentation

was the ostentation of a courtly simplicity and of a refined indifference. There is no passion in Horace, except as he almost raised the loyalty of friendship and patriotism to that rank. He takes no step save upon assured ground, and evokes no spirit that may prove restive to his control. He is never mastered by his emotion and always says less than he feels. His exact value as a poet, as a satirist, and as a practitioner of life has been long since ascertained and established, and however tempting may be the impulse to utter new words of appreciation, yet one cannot hope to add much of value to what has been so often and so excellently said. Room for one comment, indeed, remains, which has not received due consideration, perhaps because it involves a review of certain conditions that somewhat offend modern prudery. This comment concerns Horace's relations with women.

During the century between the restoration of the House of Stuart and the death of George II., between Lucy Walters and the Countess of Yarmouth (leaving out the reigns of William III. and Anne), the example of royal licentiousness found among the courtiers very prevalent imitation. The road to the king's favor lay through the apartments of his mistresses, and John Churchill was merely the most illustrious of the many men whose path to fame led through that questionable entrance. During precisely the same period, the mistresses of the French kings, from La Vallière to Du Barry, decided questions of state, bestowed bishoprics, and nominated their friends to high station in the army and navy of France; and because the Duc de Choiseul neglected to haunt the chambers of Du Barry, the best head in France was removed from his country's service. Eight hundred years earlier, the capital of Christendom

was in the power of the two Theodoras and Marozia, who made and deposed popes and emperors. This was the true pornography, and not until the coming of Hildebrand did the papacy regain its moral ascendancy. These three periods have been compared rashly with the age of Augustus, but there is one distinction between them that invalidates the comparison, for, with the development of Christianity, a new ideal, the ideal of moral purity as a religious duty, had been introduced, and now and forever after ruled the conscience of Christendom; and the more generally the ideal of chastity was recognized as a moral duty and a rule of conduct, so much the greater was the degradation resulting from its neglect or violation. Not that sexual purity was unknown to the Romans of the Augustan age. The admirable virtue of Lucretia, of Cornelia, of Portia, still lived in Roman history and in Roman tradition, and incited successive generations of noble women to the practice of modesty and chastity; but moral purity was as yet only a precept of philosophy and had not become a religious duty. Among men it was considered an intellectual attainment, among women it was mainly the impulse of a virtuous nature. Well, these barriers were insufficient. As a result of neglecting this difference in moral tone between the two epochs, moralists have visited upon Augustus and the best of his successors the same hearty condemnation that they have very properly lavished upon the disgraceful lives of Sergius III., Charles II., and Louis XV.; while the biographers of Horace have endeavored to mitigate his offense by the obviously inadequate expedient of diminishing the number of his mistresses. When Augustus lay on his dying bed, he asked the friends who surrounded him whether he had not well

played his rôle in the drama of life. Horace, too, wore a mask, but it was not, like that of Augustus, the mask of dissimulation, but that of repression. No one could be more frankly outspoken than he. No shame accrued to him from contact with the only kind of women whom his odes celebrate, and indeed Lydia and Glycera compare advantageously with the great ladies of Imperial Rome—with Livia and Julia, and with their successors, Agrippina, Drusilla, Messalina, and Poppaea. Horace, to be sure, counsels Xanthias not to be ashamed of his love for Phyllis, but Xanthias's shame arose from the fact that Phyllis was a servant and not a free hetaira, and the poet emphasizes his advice by reminding his friend that Achilles, Ajax, and Agamemnon had also taken slaves for their mistresses in Briseis, Tecmessa, and Cassandra. It was not a question of morality but of good taste. Nor is there any occasion to look askance at Horace. We cannot see him as he was unless we recognize his limitations, and to tell the truth about one who told it so freely about himself is really an act of justice. Moreover if the modern measure of propriety were to be applied to Horace, the poet's sportive wish with which he concludes the third epode, to Mæcenas, would cease to be playful.

Dryden translated several odes. His versions of the *Sic te diva*, *Vides ut alta*, *Beatus ille*, and *Tyrrhena regum* are admirable. At Dryden's death the *Exegi monumentum* was sung—less perhaps because his translations had connected him with Horace, than as a fitting prophecy of Dryden's own immortality. His translation of the *Tyrrhena regum* has been considered the highwater mark of Horatian versions. In this ode Dryden is said to have surpassed the original, but one is not consciously

guilty of an injustice to Dryden in recalling Vadius's compliment to Trissotin when they are capping laudatory extravagances in *Les Femmes Savantes*:

“*Vos odes ont un air noble, galant et doux,
Qui laisse de bien loin votre Horace après vous.*”

The Earl of Roscommon did three or four, of which Dr. Johnson says, with his usual acuteness: “His versions of the Odes of Horace are made with great liberty, which is not recompensed by much elegance or vigor.” Mrs. Catherine Phillips having warmly commended some of Roscommon’s poems, alluding to him as “one of the most promising young noblemen in Ireland,” the Earl celebrated her in return, under the name of “Orinda,” in one of his versions of the *Integer vita*. It was a time when the affectation of sentiment was esteemed above the genuine emotion, when a compliment, to be relished, must first learn to be insincere, and the more manifest the insincerity, the better.

“Look round yonder dazzling row—”

says Mr. Congreve—

“Who most does like an angel show,
You may be sure 'tis she.”

How many Celias, Selindas, Sabinas, Pastoras, do Roscommon and Prior and Congreve celebrate with their odious homage! Mrs. Phillips was Orinda, Sarah Jennings, the Duchess of Marlborough, was Amaryllis. But Waller surpassed them all. He endowed Lady Dorothy Sidney with the name of Saccharin,—no,—

Saccharissa, and poured forth at her feet verses as sweet as her name. Lady Dorothy married the Earl of Sunderland and many years afterward, meeting her ancient adorer, she asked him when he would send her some more verses as fine as the ones she had received from him of old. "When you are again as young and as beautiful as you were then," he replied, with less gallantry and more candor than perhaps the lady expected. Does such a response throw the taint of odium over his former protestations? With these fine gentlemen, love is not a question of temperament but of temperature. Roscommon, pretending to translate the *Integer vita*, warbles to Orinda:

"While, ruled by a resistless fire,
Our great Orinda I admire,
The hungry wolves that see me stray
Unarmed and single, run away.

.

"The magic of Orinda's name
Not only can their fierceness tame,
But if that mighty word I once rehearse,
They seem submissively to roar in verse."

This is neither the language of love nor that of Horace. Nor, indeed, is it a translation at all, unless one be willing to concede Lucentio's construction of the *Hac ibat Simois* to be also a translation.

The *Donec gratus* Cruttwell considers to be "in an artistic sense" perhaps the jewel of the whole collection of odes. "Here," he says, "is an entire comedy played in twenty-four lines in which the dialogue never becomes insipid, the action never flags." This seems but faint praise for this beautiful ode where every word

gleams with life and wit. Scaliger, in an ecstasy of admiration, said he would rather be the author of it than be the Emperor of Rome. In the *Donec gratus*, Horace comes within speaking distance of Burns. *My Spouse Nancy* cannot be properly esteemed superior in moral tone to the *Donec gratus*, although it records a quarrel between a man and his wife instead of a reconciliation between two informal lovers. In fact it jars upon one's sense of propriety vastly more than the ode of Horace. Humanly speaking, one would rather live with the Roman hetaira than with the Scottish wife. Burns describes a *lis pendens* and implies that the scene is a glimpse of the unending squabbles of ill-starred matrimony; Horace's freer art brings to a happy finish an amiable encounter of amorous wit and rounds it out with an admirable perfection of reconciliation. Surely, Virtue loses half of her merit and forfeits all of her power when she makes herself undesirable. Herein, Horace excels Burns in morality as well as in artistic delicacy, but this judgment concerns these two poems only. It would be manifestly unjust to compare Horace and Burns as poets, simply on the strength of a contrast between the Roman poet when he is confessedly at his best, and the Scottish poet when he is very nearly at his worst.

It would be tedious to enumerate all the English versions of different odes that have filled the three centuries between Sir Philip Sidney and Mr. Clarence Cary. They have almost all been of interest and some of eminent merit. A careful selection was made by Mr. Jourdain in 1903, which, on the whole, contains the best versions that I have seen. Since the date of Mr. Jourdain's compilation, there has appeared a book

entitled, *Horace for Modern Readers*, of which, as the latest word on Horace, something may properly be said. It contains many inaccuracies of statement and many violations of good taste, the enumeration of which would be facile but the recital tedious. The editors "claim the merit in this work of bringing the attention of the public to the striking poetic talent of De Vere." This service had been already done, several years earlier, by Mr. Jourdain, whose collection contains eleven of De Vere's translations, a number that is only exceeded by those of Mr. Rutherford Clark, who contributes twelve, and by those of Mr. Jourdain himself, who supplies sixteen. And now that I have spoken again of Mr. Jourdain's collection, I must confess (for who is satisfied with mere excellence?) that I was disappointed on not finding Lord Lytton represented at all, and I think Mr. Martin's version of the *Nunc est bibendum* better than Lord Derby's. The editors of *Horace for Modern Readers* say, "The wise gods keep in Caligian darkness the events of the future." I wondered at first where Caligia was to be found, but, after a long search, I discovered, in one of the lost books of Hermes Trismegistus, that "Caligia" was the old and hitherto unused name for the Country of the Chitterlings. It has been sometimes confounded with Nephelo-Coccygia. It is bounded on the north by Cocytus, on the east by Valhalla, on the south by Laputa, and on the west by Scotia, which does not refer to the Land of Bannocks, but to the country which the Greeks called Σκοτία, or the Land of Darkness. It is easily found, though the road is traveled less now than formerly, thanks to Mr. Carnegie's library scheme to eradicate, or at least to impoverish, ignorance, for if you start from Mohammed's Coffin and follow the

cocklicrane, the East Wind will bear you to the misty confines of Caligia, where the people live in windmills and walk about with their heads in the clouds, discussing methods for the Suppression of Vice. Horace thought to conceal all this by giving to "*caliginosa nocte*" the appearance of meaning simply "in misty night," but the editors of *Horace for Modern Readers* have detected its really occult significance. There are, moreover, among the metrical versions in this book, two guests that have not on the wedding garment. One is the *Tu ne quæsieris*, in which the lines occur:

"Let's drink the wine our taste prefers,
Forget exhaustion of the nerves,
Our local ills
And nervine pills."

Farther from the spirit of Horace it would be difficult to stray, but it is a marvel of delicacy when compared with the horrible travesty of the *Lydia*, *dic per omnes*, whose authorship it is to be hoped the editors of *Horace for Modern Readers* will never disclose. This is not a translation, it is not a paraphrase—it would be fulsome flattery to call it a burlesque. It seems to have been written for a wager in a contest of vulgarity. Lest this opinion should seem too lenient, here are the lines themselves, the *ipsissima verba*:

"By all the gods, O Lydia,
How did you get the knack
Of making so domestical
The former agile Mack?"

"He was clever with the discus,
And when he threw the dart
The people often said, 'This cus
Is really very smart.'

“ He drove the fastest horses too,
And pulled the jagged bit;
When they attempted any tricks
He simply would say ‘nit!’ ”

“ They once took brave Achilles
And made of him a nurse,
But Lydia—or Phyllis—
I fear you’ve done Mack worse.”

There it is! Let it stand, as defining the nethermost limit of impropriety! But who, Mr. Editor, *per omnes te deos oro*, who is this insufferably vulgar “Mack”? And yet the vulgarity is not really in Mack, whoever he may be, but in the translator, who suppresses the elegant Sybaris and substitutes this unseemly bounder.

A writer in *Blackwood* is of the opinion that “the difficulty in rendering the spirit of Horace’s lyrics sufficiently clear in translation is materially increased by the resort to rhyme; not so much because the true meaning is often sacrificed to the necessities of rhyme, but because rhyme itself is inseparably associated with forms of poetry, whether medieval or modern, wholly opposed to the essential genius of classic rhythm.” This advice Lord Lytton illustrated and Milton anticipated in the two translations, already given, of the *Vitas hinnuleo*, of the one and of the *Quis multa* of the other. Much has been said in disparagement of rhymed translations, but not enough to deter translators from making them. And their instinct seems to have been a true one. English verse without rhyme gives one the effect of diffusion and incompleteness. In the long array of English poets, one would search vainly for a half-dozen who have achieved success in unrhymed verse. It seems to lack finish. If this be true,

it becomes the very worst possible medium in which to reproduce the *carmina operosa* of Horace. Every one recognizes in them the perfection of metrical form, and the finest and most elaborate structure of Roman poetry can adequately be represented, if at all, only by the most perfect poetical analogue in our own tongue. Even with the finish that rhyme imparts to the English version, Horace's Alcaics and Asclepiadeans are poorly enough represented by the mechanical see-saw of English iambics.

But as respects rhyme, there is yet something more to say. The pleasure that we receive from the regular recurrence of similar ultimate cadences was little known and not at all understood by the Roman poets, but nevertheless, it was vaguely felt. Cruttwell finds the beginnings of rhyme in the *Integer vite*:

*“Pone me pigris—ubi nulla campis
Arbor aestiva—recreat cur aura”*—

and every one has admired the multitudinous rhymes in Virgil's challenge to Bathyllus. There can be no doubt that the Roman poets were pleased with these consonances. Admiring uncertainly the beauty of casual rhymes, they yet had not learned to produce them regularly and systematically. Their ear was startled and pleased with the rounded recurrence of regular consonance, but their mind could not clearly analyze, nor their skill distinctly reproduce, the melodious charm. Ovid, in the rush of hasty writing, was conscious of it; Horace, in the ode that marks his highest lyric inspiration, when his head touched the very stars, *sublimi sidera vertice*, used it with true instinct. What a noble fervor is in these lines!

“*Qui primus alba risit adorea
Dirus per urbes Afer ut Italas,
Ceu flamma per tædas vel Eurus
Per Siculas equitavit undas.*”

Suetonius, in his life of Cæsar, has an epigram:

“*Gallos Cæsar in triumphum dicit, idem in curiam,
Galli bracos deposuerunt, latum clavum sumperunt*”—

and it is in these perfectly finished distichs, these polished epigrams, that rhyme would certainly have found its obvious use, if that use were understood, for it would lend them an antithetical completeness that a longer poem would not need. The lack of initiative among the Roman men of letters has been often remarked. No original form of verse arose among them. In the judgment of Cæsar, Cicero, Quintilian, and Scaliger, Terence is one of the eminent poets of Rome. Well, Terence took from the Greek both form and matter, and not only did he openly acknowledge what it would have been impossible for him to hide, but in the prologue to the *Heautontimoreumenos* he even boasts of it. What the Romans received they transmitted, and it was not until three centuries after the death of Quintilian, that the conscious addition of rhyme was first introduced into those Latin hymns which breathe rather devotion than poetry. Saint Jerome, who died in the year 420, quotes some of these early Latin rhymes:

“*Qui pingit florem, non pingit floris odorem;
Si quis det mannos, ne quære in dentibus annos*”—

which, by the way, seems the earliest form of the protest against looking a gift horse in the mouth.

We have thus reviewed the various kinds of translations that have been up to this time made of Horace's

odes. Every variety of metrical form has been in turn rejected and adopted except one, and that one has been universally considered impracticable. So far as I know, the attempt has never been openly made to reproduce the original meters of the Roman poet.

There is no need to review the distinctions that are well recognized between the quantity of Latin verse and the accent that takes its place in English poetry. That Latin meters can be not only represented but reproduced is a part of the record of successful experiment. Tennyson's Alcaics and Hendecasyllabics are well known, and have been esteemed worthy of inclusion among his published poems. Mr. Clough has some really remarkable verses, which deserve more attention than they seem to have received. They are Alcaics.

"So spake the voice, and as with a single life
Instinct, the whole mass, fierce, irretainable,
Down on that unsuspecting host swept—
Down with the fury of winds that all night

"Upbrimming, sapping slowly the dyke, at dawn
Fall through the breach o'er holmstead and harvest, and
Heard roll a deluge; while the milkmaid
Trips in the dew, and remissly guiding

"Morn's first uneven furrow, the farmer's boy
Dreams out his dream. So, over the multitude
Safe-tented, uncontrolled and uncon-
trollably sped the avenger's fury."

Now, what if these lines were instinct, not with nonsense, but with a luminous thought? Surely they only need the spirit to breathe into them the breath of life to become something more than an experiment, and

what field so favorable for the attempt as the odes themselves? I append, without further comment, some of my versions, wherein I have reproduced the Sapphics and Asclepiadeans of the original measures.

JAM SATIS

(Lesser Sapphics)

Direful hail and snow full enough from heaven
Father Jove has poured on the earth, and thunder
From his red right hand flashing down, has riven
Temples asunder,

Till the people feared lest the floods, restoring
Pyrrha's ancient reign, should unseal their fountains,
When the seaborn herd of old Proteus, roaring,
Sought the high mountains;

When the fishes poised where the doves once nested,
When the frightened deer, all a-mort and weary,
Swam the shoreless waste where the waters rested
Soundless and dreary.

We ourselves have seen yellow Tiber rushing
Seaward down, impetuous, barriers-spurning,
Vesta's fane and towers of Numa crushing,
Cruelly turning

From his wonted course to become a ranger,
Like a boastful lord on his spouse dependant,
Moved by Rhea's importunate grief to avenge her
Greatest descendant.

Youth, though few through guilt of their sires, shall listen
How the thirsty steel was for kinsmen whetted,
Which in Persian warfare would better glisten,
Bloodily wetted.

What high power our doom can avert, restoring
Safety, peace to Rome ere her fall be ended?
How the holy maids may they pray, imploring
Vesta offended?

Who can purge our guilt with a charm unfailing
Sent by Jove? Apollo, come! God of healing,
Cloud engirt, thy luminous shoulders veiling,
Wisely concealing!

Or if thou wilt come, Queen of Love, auspicious,
While young Joy and gentle Desire surround thee,
Or if thou, O Mars! be to us propitious,
Pleading around thee,

Let the prayer reach thee of a race forsaken,
Rising o'er the din of ensanguined battle,
Where the Moor's bright arms, from his horse death-shaken,
Clangorous rattle;

Or, in mortal form of transcendent beauty,
Earthward come, swift Son of fair Maia, deigning
Thine to avow the Cæsar-avenging duty;
Joyously reigning,

Long delay thine airy return, sublimely
Rapt on coursers fleet of the storm-blast; rather
Life and Joy diffuse, nor from us untimely
Vanish, our Father!

Here await thee triumphs and glad ovations;
Vassal kings from Tigris and Thames and Eser,
Bearing gifts from savage and distant nations
Yield to thee—Cæsar!

QUIS DESIDERIO

(Third Asclepiadean)

Who shall measure our tears, who be ashamed to grieve
For that head so beloved? Teach me, sad Muse, the strain
Wherewith, sung to the lyre thou didst from Jove receive,
Thy sweet voice may beguile our pain.

Lo! Quintilius lies, wrapped in eternal sleep!
Where shall Modesty search, urging a hopeless quest,
When shall Justice and Faith, Truth in her councils deep,
Find safe harbor in such a breast?

All good citizens mourned when he had passed away,
Thy tears, Virgil, and sighs plainly thy love accuse;
Vain thy sadness and grief! Vain the attempt to pray,
Such petitions the gods refuse.

What though sweeter thy voice, richer than Orpheus'
strains,
Though in pity the rocks melt and the tigers weep,
Yet Love cannot restore life to the empty veins,
When that Herald of endless sleep

His dread summons hath served, ruthless to vow or prayer,
Driving onward his dim prey to the silent shore.
Bitter fate! But, alas! we must have patience where
Love and Hope can avail no more.

VIII

SOME FEATURES OF THE SCIENCE OF MEDICINE IN THE SEVENTEENTH CENTURY

IT must not be forgotten that in medicine as in all progressive, and especially in all intellectually progressive, pursuits any distinct period of time is the offspring of the previous and the parent of the succeeding period. Ideas have come over into it from its predecessors and have been transmitted with a variable increment of development to its successors. In this way the seventeenth century is the child of the sixteenth and the parent of the eighteenth century.

In searching for a vital point about which the achievements of this period may group themselves; in seeking the one great fact that distinguishes the seventeenth century from those that preceded it and those that followed it, there can be little hesitation in acknowledging the theory of the circulation of the blood to be the most important contribution to medical science during this period.

Prior to the discovery of Harvey, there had been little advance on the view taken by Praxagoras of Cos in the third century B.C. He is believed to have discovered a distinction between the arteries and the veins, according to which the veins carried blood, while the arteries distributed the vital spirits through the body.

The greater thickness of the arterial walls was rendered necessary by the volatile character of their contents. The vital spirits were not fluid nor were they visible. They did not bubble in water as air would do. According to this theory, the blood that passed from the cut end of an artery, when a limb was severed, had suddenly been absorbed from the adjacent injured parts, the vital spirits forcing this blood violently through the severed artery.

It would seem as if the discovery of the valves in the veins should have opened up the way so plainly that the remaining step might follow immediately as a consequence; but it is easy to be wise after the fact. Harvey was long perplexed. "I found the subject so full of difficulties," he says in the *Exercitatio*, "that I was ready to believe with Fracastorius (*motum cordis soli Deo cognitum fuisse*), that the action of the heart could be comprehended by God alone." He pursued the matter for years before the whole truth was opened to him. At length, however, he was able to give a full account of his great discovery in his work entitled *Exercitatio Anatomica de Motu Cordis et Sanguinis in Animalibus*, but there was no bookseller in London who would publish it. So he went over with his manuscript to Frankfort, where in 1628 it was finally printed and issued.

EARLY SEVENTEENTH-CENTURY SCIENCE AND MEDICAL THEORY

It was a strange world on which burst this sudden gleam of unaccustomed light. The belief in the transmutation of metals, the search for the elixir of life, judicial astrology, magic, and witchcraft lay like a five-

fold incubus on the minds of men. Let us take a passing glance at the attainments of the scientific mind in the beginning of the seventeenth century.

The belief in the transmutability of the baser metals into gold was as firm in the seventeenth century as in the twelfth. It was not perhaps as prevalent, but it was as sincere, and as eagerly prosecuted. It was stimulated, moreover, by plausible successes in the past. Raymond Lully was said to have changed fifty thousand pounds of some other metal into gold for Edward I. of England, and many instances of similar success still held out vast promises of wealth and the power that comes from wealth to the eager hopes of the contemporaries of Milton and Sir Thomas Browne. The word "element" was current at the time in a sense so near to that which it now bears as to obscure the essential difference between the two actual meanings. Everything was thought to consist of one or more of the four elements then recognized—earth, water, fire, and air—but these so-called elements themselves were not thought of as simple, homogeneous, indivisible bodies, which is our present conception of an element. So the metals were regarded as compounds, and mercury and sulphur were thought to be their constituents. The only necessity, then, for the production of gold was a rule that would give the requisite directions as to the amount of the mercury and of the sulphur required, the degree of purity that was requisite in each, and the temperature to which the mixture was to be exposed, as well as the period of exposure. It was stated¹ as an ascertained and familiar fact that gold was composed of a most pure red sulphur and of the purest quicksilver.

¹ Charles Swan, *Speculum Mundi*.

This metal is only perfect; all other is corruptible. It is concocted with sufficient heat and mixture of sulphur, whereas all other metals, either are not so well concocted, or else they have not the due quantity of brimstone; and because Nature in all her works seeketh the best end, she intendeth of all metals to make gold; but being hindered either for want of good mixture or good concoction, she bringeth forth other metals. Silver is the most pure metal next unto gold. It hath an indifferent good concoction, but it wanteth sufficient heat in the mixture and therefore it looketh pale. It is a metal composed of pure white mercury and of clear white brimstone or sulphur.

This book was published in the year 1635, the year before Harvard College was founded. Sir Thomas Browne was then thirty years old; Milton had already achieved fame as a lyric poet, and Charles I. had occupied the throne ten years. As an indication of the tenacity of this belief, I may add that about the beginning of the nineteenth century, Dr. Girianger of Göttingen made the confident prediction that before the nineteenth century had closed "the transmutation of metals will be generally known and practiced. Every chemist will be able to make gold."

If the transmutation of the metals was an appeal to men's thirst for power through the acquisition of wealth, judicial astrology was an attempt to gratify their desire to know what the future would bring to them as individuals. It is believed that alchemy gave birth to chemistry, and astrology to astronomy; but this is only partly true, for in each the method has been altered, the purpose has changed, and the result altogether differs. But in the seventeenth century everybody believed in astrology. It was recognized by Parliament and accepted by Oxford and Cambridge. The author

of the *Anatomy of Melancholy*, Robert Burton, an English clergyman and a resident fellow at Cambridge, cast his own horoscope, and his life ended at the moment he had predicted.

Bacon, in his *Essay on Prophecies*, says:

When I was in France I heard from one Dr. Pena, that the queen-mother, who was given to curious arts, caused the king her husband's nativity to be calculated under a false name; and the astrologer gave a judgment that he should be killed in a duel; at which the queen laughed, knowing her husband to be above challenges and duels.

But he was slain in a tournament, running against a knight named Montgomery, whose lance was split, and a splinter ran in at the king's beaver and killed him. Bacon died in 1626, two years before Harvey's book appeared.

In the year 1647, the astrologer William Lilly was consulted by King Charles I. as to some expedient that would ensure the royal safety. The king's horoscope was cast and a way pointed out by which danger might be averted; but among the crowd of royal counselors, he neglected to follow the advice of the astrologer, and lost his kingdom and his life. In 1651, Lilly published a book called *Monarchy or No Monarchy*, containing two hieroglyphic figures, copies of which are in my possession, which seem to foretell the plague of 1665 and the great fire that destroyed the city of London in 1666, fifteen years after the prophecy was published. He also predicted the exact duration of the interregnum and foretold the date of the Restoration.

In 1665, Lilly settled at Horsham and in 1670 he was licensed to practice medicine. Lilly's *Grammar of Astrology* was so much in vogue at Cambridge that he

dedicated a second edition to that university. John Kepler, who died in 1630, and who discovered that the planetary orbits are elliptic and not circular, was not only an astronomer, but he also advanced astrology by developing some of its theories. He even added five aspects to the five that were in use before his time. There was, to be sure, a strain of mysticism in Kepler's nature which brought him into sympathy with occult forces.

As the production of gold promised power, and as astrology foretold the future, so the elixir of life held out a certain hope of the renewal of youth. The quest of the elixir was becoming less general and less confident of success, but it had not entirely died out at the middle of the following century, for Casanova duped Mme. D'Urfey into a belief in his ability to rejuvenate her, and he tells the story himself. Sir Thomas Browne, a physician of well-merited fame, acknowledged that the desire for length of days is not an unlawful one, but he perceived the fallacy of the attempt to procure it. He said:

Were there any hopes to outlive vice, or a point to be superannuated from sin, it were worthy our knees to implore the days of Methuselah. But age doth not rectify but incurvate our natures, turning bad dispositions into worser habits and, like diseases, brings on incurable vices; for every day as we grow weaker in age, we grow stronger in sin, and the number of our days doth but make our sins innumerable.¹

On March 14, 1618, Margaret and Phillis Flower were executed for the crime of bewitching Henry, the eldest

¹ This passage may be found in the *Religio Medici*, which was published in 1642.

son of the Earl of Rutland, and causing his death, and "for preventing by diabolical arts the said earl and his countess from having any more children." They were tried before Sir Henry Hobart, the chief justice of the Common Pleas, and condemned to death. It was proved that to destroy the son, they had taken a glove belonging to him and had buried it in the ground; and that "as that glove did rot and waste, so did the liver of the said Henry rot and waste." They were burned at the stake.

Among the many varieties of magic practiced in the seventeenth century none were more prevalent than the one alluded to in *Macbeth*:

"I will drain him dry as hay,
Sleep shall neither night nor day
Hang upon his penthouse lid;
He shall live a man forbid,
Weary sennights nine times nine
Shall he dwindle, peak, and pine."

King James I., who succeeded to the English throne in 1603, wrote a book on *Demonology* in which he says: "The Devil teacheth how to make pictures of Wax or Clay, that, by roasting thereof, the persons that they bear the names of may be continually melted or dried away by continual sickness." In Scot's *Discovery of Witchcraft* the process is described: "Make an image in his name whom you would hurt or kill, of new virgine wax, under the right arme-poke whereof place a swallow's heart, and the liver under the left; then hang about the neck thereof a new thread in a new needle pricked into" the part of the image corresponding to the heart of the person whom you wish to destroy. This waxen image was then exposed to a slow fire, and

as the image dwindled away so the person himself pined and wasted. This form of magic was in general use throughout Europe. At least we know of its being practiced in Italy and France during the seventeenth century. My edition of Baker's *Chronicle* bears the date 1674, during the reign of "Charles II., by the Grace of God, of Great Britain, France, and Ireland, King." Baker narrates the attempt of the Duchess of Gloucester against the life of Henry VI. The crime objected against her was procuring Thomas Southwell, John Hume, priests, Roger Bolingbroke, a necromancer, and Margery Jordan, a witch, "to devise a Picture of Wax in proportion of the king, in such sort by Sorcery, that as the Picture consumed, so the King's Body should consume, for which they were all condemned."

The witch statutes of the English penal code were enacted in the thirty-third year of Henry VIII., in 1542, and were not repealed until 1736, the ninth of George II. During the whole of the seventeenth century, then, they were enforced by the authority of the Crown, of Parliament, and of the King's Bench. In that century, too, every one believed in witchcraft. Sir Thomas Browne concurred without hesitation in the justice and propriety of the laws punishing witchcraft with death. Perhaps no abler judge has ever sat on the bench than Sir Matthew Hale, the famous chief justice during the reign of Charles II. His vigorous intelligence, his rectitude of judgment, his gentle disposition, and his clear mind, combined with his remarkable learning to make him a great judge. At Bury St. Edmunds, in 1664, at the spring assizes, two widows named Rose Cullender and Amy Duny were tried for witchcraft in his court. They were accused of having

bewitched several children, among whom were Elizabeth and Deborah, aged 11 and 9 years, children of a merchant named Samuel Pacy. The father testified that his younger daughter, being lame and unable to use her legs, had been carried out to a bank overlooking the sea, and while she sat there, Amy Duny, who had the repute of being a witch, came to the house for food and was refused. She went away grumbling, and at the moment when she passed by the bank where Deborah Pacy was sitting, the child was seized with a violent fit. The child's father at once lodged a complaint before the local magistrate, and Amy Duny was ordered to be set in the stocks. While she was there two women asked her what she had done to Deborah Pacy. She replied: "Mr. Pacy keeps a great stir about his child, but let him wait until he has done as much by his children as I have done by mine." Being asked what she meant, she said that "she had been fain to open her child's mouth with a tap to give it victuals." This remark was passed from mouth to mouth, and a few days later the elder daughter of Mr. Pacy was also taken with a fit and could not be made to open her mouth until a tap had been forced into it. The fits continued with the two children who would say, while in convulsions, "There comes Amy Duny," or "There is Rose Cullen-dor," and when the fits were over they would say that they had seen the two witches shaking their fists and threatening them. When any one uttered the name of Jesus in their presence, they would fall into renewed convulsions. This name they themselves refused to pronounce and when asked for the reason, they replied, "Amy Duny says I must not say that name."

Sir Thomas Browne was present at this trial. His book on *Inquiries into Modern Errors* had been pub-

lished eighteen years before. He "was clearly of the opinion that the children were bewitched," and that these fits were "heightened to a great excess by the subtlety of the devil, coöperating with the malice of those witches at whose instance he doth these villanies." The accused women were confronted with the children over whom they seemed to possess such a diabolic influence, and the children screamed at their touch. Sir Matthew Hale then caused the children to be blindfolded, but in this condition they screamed aloud when any one touched them, without being able to distinguish the touch of their tormentors. This somewhat perplexed the judge, until it was suggested that they "might be deceived by a suspicion that the witch touched them when she did not"; which might indeed prove that the children's terrors were sincere, but should also have instructed them that this whole series of phenomena was the result of an abnormal process in the minds of the children. The women were condemned as witches on this evidence, however, and were burned to death without making any confession, March 17, 1664.

"Now the inference to be drawn from this trial," says the writer from whom I have taken the details of this case, "is not by any means that Hale was a credulous enthusiast. The whole history of his life disproves it. But the belief in witchcraft was in the very atmosphere which Hale breathed." Witchcraft was a thing taken for granted; it was a postulate of the English mind in the seventeenth century. It was during the reign of James I. that Agnes Sampson was accused of being one of two hundred witches who sailed in sieves from Leith to North Berwick to a devil's sabbath that was held there. The king himself

examined her while she was being tortured, and satisfied himself of her guilt. In Mackay's *Memoirs of Extraordinary Popular Delusions*, quoted in Mallet's *Northern Antiquities*, the estimate is made that in England during the seventeenth century no less than forty thousand persons were condemned and burned at the stake for the imaginary crime of witchcraft.

During this period the censorship of books was strictly enforced, and the reason that Harvey's book could not be published in England throws a significant light on the period in question. The fact is that a London publisher would have risked his life in printing it, for the press censorship was at that time firmly established in England, and was vigorously flourishing its weapons in the cause of ignorance, prejudice, and bigotry.

The *Index Expurgatorius* and the *Index Librorum Prohibitorum* were joined together under the control of the Congregation of the Index, and formed one of the most effective weapons with which the Roman Church armed itself to oppose the progress of the Reformation.

In 1539, the Emperor, Charles V., obtained a papal bull authorizing him to procure from the University of Louvain in Flanders, where the Lutheran controversy would naturally be better understood than in Spain, a list of books which it would be dangerous to introduce into his dominions. It was printed in 1546, and was confirmed and promulgated anew in 1550. In 1558, Philip II. ordained the punishment of death against any person who should sell, buy, or own any book so prohibited. In 1564, Pope Pius IV. issued the first list of prohibited books that was authorized by the Council of Trent, and handed over to the Inquisition the en-

forcement of his decree. The Index became so powerful an instrument in the suppression of heresy that it was adopted by the reformers themselves. Servetus was burned at the stake in Geneva for writing his *Christianismi Restitutio*, the very work in which he recorded his observations on the circulation of the blood. In 1564, Queen Elizabeth ordered an examination of the cargoes of all vessels entering the Thames, in order that any heretical book might be seized and destroyed. She also decreed that any person should be deemed guilty of high treason and liable to a sentence of death, if found possessed of any book in which the doctrine of papal supremacy was taught. Under Charles I., in 1637, the Star Chamber published an act for the regulation of literature in which the penalty of selling any books opposed to the authority of the Church of England was decreed to be a fine, imprisonment, and public whipping. The next year, in 1638, a clergyman named Leighton, who had published a book declaring the institution of bishops to be antichristian, was sentenced by the Star Chamber to a fine of £10,000, to degradation from the ministry, to be publicly whipped, to stand in the pillory, to have one ear cut off and one of his nostrils slit and to be branded on the cheek. That was ten years after Harvey's book was published.

It was six years later, in 1644, that Milton addressed both houses of Parliament on the subject of the "Freedom of the Press," but his splendid persuasion "was thrown away on the dull ears of his Puritan associates." The Star Chamber had already, before the death of the Earl of Strafford (in 1641) been abolished, but it was not until after many years that the censorship of the press was discontinued. Indeed, the fact is recorded that in 1686 a printer named Trogan, who had in some

way come under the peril of the law, was executed, and that in 1698 a young Scotchman named Aikenhead was hanged because he had referred to Christianity as a delusion. George Haven Putnam, in his work entitled *The Censorship of the Church of Rome*, says that the censorial laws remained on the statute-book until 1695. Indeed, while the censorship of the press became less generally active and less customarily enforced, it was not until 1775 that the last book was ordered by the Parliament to be burned. The title of this work, on which England exercised its belated resentment, is not without interest to us. It was *The Present Crisis in Regard to America Considered*. This was the year in which Dr. Johnson's tract entitled *Taxation No Tyranny* appeared. All this is perhaps more nearly related to the history of literature than to that of medicine, but it is not quite irrelevant, if it be true that the London publishers were deterred from printing Dr. Harvey's essay by the fear of being subjected to the rigorous reprisals of the government for bringing out a work that might receive official censure. The publishers of such a work could expect nothing short of ruin.

That ruin might easily have resulted was proved by the keen opposition that Harvey's discovery encountered throughout the whole of Christendom. The laws against unlicensed printing were at this time enforced in all their rigor; and no adequate argument had yet, in 1628, exposed their iniquity. Moreover, while in England there was less virulent antagonism to Harvey's theory than on the continent, yet this was so essentially revolutionary that the authority of the Star Chamber must have been invoked for its suppression and for the punishment of the printers, if these had been within the jurisdiction of the English courts of law.

In the seventeenth century the works on natural history contained descriptions of the unicorn, the dragon, the basilisk, and other fabulous monsters, which had constituted the folk-fauna of medieval romance. Ambrose Paré did not doubt the existence of the basilisk. He even gives a drawing of the monster with his description of it. These works stated seriously that at the approach of winter the humming-birds clung to the branches of the trees by the bill and there died; that the sun and the spring rains revived them and they detached themselves and flew "about their business." The swallows spent the winter in the mud at the bottom of rivers and lakes, whence they were sometimes dragged to the surface in fishermen's nets. In the year 1663 the Thames was frozen over, and booths were erected and games played on the ice. Pepys records that large holes were dug and nets of great length spread under the ice, wherein at a draught from 130 to 170 barrels of fish were taken. "Swallows are often brought up in the nets out of the mudd from under water, hanging together to some twigg or other, dead in ropes, and brought to the fire will come to life."

Burton, writing in 1625, speculated whether the peak of Teneriffe was seventy miles high or only fifty. Its actual height is 12,192 feet. Vicente Espinel,¹ who died in 1634, believed that the water in Spain was lighter and more easily digested than that in Italy, "because the latter contained more moisture." So in *Purchas His Pilgrimes*, published in 1625, we read: "Some of our merchants have weighed the water at Aleppo and ours in England, when they have come home, and do find their water lighter than ours by four ounces in the pound; and the lighter the water is, the

¹ In his *Marcos de Obregon*.

more pleasant it is to drink, and goeth down more delectably as if it were milk rather than water."

They declared that since the heat of the sun in England could draw the water out of a saucer, doubtless in torrid countries its more vehement heat could also draw up wheat and other grains, and even draw the milk out of a cow; that sorcerers could sell winds to sailors by the help and favor of the devil, who is called in Scripture the Prince of the Air (*Ephes.* ii., 2), and that rock crystal was nothing but ice that had been long frozen. They argued that the land floated on the surface of the sea like an island; and that there was more land than sea they proved from the passage in the book of Esdras, in which it is said that God gathered the waters into the seventh part of the earth and dried up the other six parts. They similarly believed that only the superficies of the earth was land, and that the waters bore up the earth, for the reason that the psalmist says (*Ps. xxiv.*, 2), "He hath founded it upon the seas and established it upon the floods." Thus rivers have their origin from the sea, "which is the fountain-head from which all fountains have their springs." The argument was final that drew its proof from the Scriptures.

It is almost as difficult to realize what was the condition of medicine without chemistry and without physiology as it would be to realize what our civilization would be without Christianity; and yet until the seventeenth century, the few and uncertain steps that these sciences had made is a matter of keen surprise. In chemistry they had learned to obtain by distillation alcohol from wine, acetic acid from vinegar, sulphuric acid from alum, and nitric acid from potassium nitrate (saltpeter) and ferrous sulphate (green vitriol). They

had discovered how to convert metals into their oxids by heat and how to purify sulphur. They were acquainted with silver nitrate and mercuric chlorid (corrosive sublimate).

There seem to have been two different kinds of elements recognized, one of a physical and physiologic and the other of a chemical character, if these terms may thus prematurely be employed. The physiologic elements were earth, air, fire, and water, of which in varying proportions all bodies were composed. These were modified by the four temperaments, hot, cold, moist, and dry. There is something physiologic about them, since they altered and in turn were altered by the changing conditions of the body, and their fluctuations had a varying effect on the vital processes. The chemical elements were sulphur and mercury, regarded as simple substances, to which salt was afterward added as a third element. It has been affirmed that these substances were not at all what we have in mind to-day when we speak of them; that sulphur was that property of matter that was destroyed in combustion, that mercury was the property that was volatilized and could be recovered, and that salt was the ash or residue; but there can be no doubt that when the alchemists of the seventeenth century experimented with sulphur and mercury, they did not expect that the result would be a new grouping of attributes or a complication of symbols, but a real and tangible compound of sulphur and mercury, to wit, gold.

The comparative importance of the four physiologic elements was a fertile field for philosophic and polemic discussion throughout Christendom for many centuries. To narrate it would be to narrate the search for the chimera. In the early years of the seventeenth century,

however, Van Helmont determined to submit the question to an exact test. He planted a willow weighing five pounds in a tub of earth, and for five years added nothing but water to the tub. At the end of five years the willow weighed 169 pounds and the earth in the tub had lost two ounces. He concluded therefore that at least 164 pounds of the tree must be water. As a result of his experiment, he announced his belief that there were only two elements, air and water. His test was a good one and showed the scientific spirit that was abroad. Of course he could not know anything of carbon dioxid and of chlorophyl. He died in 1644.

There were thought to be three spirits which inhabit the body, the natural spirit whose seat was the liver, the vital spirit whose home was the left ventricle, and the animal spirit which dwelt in the brain. The natural spirit pervaded the venous blood, the vital spirit was carried by the arteries, and the animal spirit coursed through the nerves, which were tubular in life though closed after death.

The liver was considered to be the seat of anger, the spleen that of envy, and the heart that of love and courage. The four humors which Hippocrates had discovered and named still ruled the body. These humors were blood, phlegm, black bile, and yellow bile. The spleen was the seat of the black bile, and melancholy was a disease of the spleen; the liver was the seat of the yellow bile. The nasal mucus was still regarded as the condensation in the brain of the vapors which mounted from the body. Digestion was still thought to be produced by the innate heat of the stomach. It was a kind of cooking, and was, in fact, called coction.

As for the physiology of the brain, it was comprised in a few words: "The three principal faculties of the

mind,—the understanding, the imagination, and the memory,—reside in the different ventricles of the brain, the imagination having its seat in the forepart, the memory in the hinderpart, and the judgment or understanding in the middle." This is, of course, a philosophic and not a scientific conjecture.

The distinction between philosophic medicine, as inculcated by the followers of Galen, and scientific medicine, as introduced by the use of experiment and observation, finds a curious comment in a story that is told of a question propounded by Charles II. for the consideration of his courtiers, "whether a vessel of water would gain in weight by putting a fish into it." Long and hot the discussion lasted, and the conclusion was finally reached that a live fish would not increase the weight of the vessel, but that a dead fish would. This was philosophy. Long afterward it occurred to some skeptic to test the conclusion by actually weighing the vessel under these different conditions. This was science.

Dr. Willis, as late as 1659, maintained that all natural changes in organic bodies depended on fermentation in their constituent principles, which were spirit, sulphur, salt, water, and earth. Sir George Ent, the President of the Royal College of Physicians, taught that the purpose of the blood was not to nourish the body, but to keep it warm, and that "the urine is not conveyed to the kidneys by the arteries but by the nerves."

Indeed, it is not an easy task to discover among the various physiologic beliefs that were current before Harvey, any that still hold a place in modern science. The microscope, in its early form and considered mainly as an interesting toy, dates from the beginning of the seventeenth century. It consisted merely of a double

convex lens in a frame, with an eyepiece holding a single convex lens. With this simple apparatus the circulation in the capillaries was observed and the red and the white corpuscles of the blood were discovered.

Bacon's treatise on *The Advancement of Learning* appeared in 1605. In this essay he not only summarizes the spirit of the intellectual development of the past, but also ventures to indicate the present defects and to point out the path of progress to the future. His scope is so wide as to leave no intellectual interest unconsidered and no intellectual activity unnoted, and among them all, he pays due regard to the theory of medicine. Among other defects he notes the lack of careful intimate study of the body. He says:

As the sense afar off is full of mistaking, but is exact at hand, so it is of the understanding; the remedy whereof is not to quicken or strengthen the organ, but to go nearer to the object. Medicine is a science which hath been more professed than labored, and yet more labored than advanced; the labor having been in my judgment rather in circle than in progression. For I find much iteration, but small addition. . . . The deficiencies which I think good to note . . . I will enumerate.

The first is the discontinuance of the ancient and serious diligence of Hippocrates, which used to set down a narrative of the special cases of his patients, and how they proceeded and how they were judged by recovery or death. This continuance of medical history I find deficient, which I understand to be neither so infinite as to extend to every common case, nor so reserved as to admit none but wonders. For many things are new in the manner which are not new in the kind; and if men will intend to observe, they shall find much worthy to observe.

As for the footsteps of disease, they ought to have been exactly observed by a multitude of anatomies, and the con-

tributions of men's several experiences, and carefully set down, both historically, according to the appearances, and artificially, with a reference to the diseases and symptoms which resulted from them, in case where the anatomy is of a defunct patient; whereas now, on opening of bodies, they are passed over slightly and in silence.

In these few words is a recognition of the benefit to be derived from a careful and painstaking record of cases and from post-mortem examination, which the physicians of this generation now readily acknowledge, but which was almost entirely neglected during the earlier part of the century which at present occupies us. We certainly know to-day that only thus do we reap the full advantage of our own experience, for memory is treacherous and impressions fleeting. Before the seventeenth century closed, this reproach was to be removed from the record of medicine.

Vivisection of animals could scarcely seem to promise much valuable instruction while the theory of the humors underlay, or rather overwhelmed, all the conceptions of physiology; but Bacon's insight into the needs of medicine in his time is nowhere more keenly indicated than in his recognition of the value of vivisection; for Bacon himself accepted the so-called humoral pathology that was destined to dominate medicine until its reluctant sway was broken by Pasteur and Virchow. Here are Bacon's words:

In the inquiry which is made by anatomy, I find much deficiency; for they inquire of the parts and their substances, figures and collocations; but they inquire not of the diversities of the parts, the secrencies of the passages, and the seats or nestlings of the humors, nor much of the footsteps and impressions of diseases; the reason of which omission I suppose to be because the first inquiry may be satisfied in the

view of one or a few anatomies; but the latter, being comparative and casual, must arise from the view of many. And as to the diversity of parts, there is no doubt but the framing of the inward parts is as full of difference as the outward, and in that is the cause continent of many diseases, which not being observed, physicians quarrel many times with the humors, which are not in fault, the fault being in the very frame and mechanic of the part. And for the passages and pores, it is true what was anciently noted, that the more subtile of them appear not in anatomies, because they are shut and latent in dead bodies, though they be open and manifest in life: which being suffered, though the inhumanity of *anatomia vivorum* was by Celsus justly approved; yet in regard of the great use of this observation, the inquiry needed not by him so slightly to have been relinquished altogether, or referred to the casual practice of surgery, but might have been well diverted on dissection of beasts alive, which, notwithstanding the dissimilitude of their parts, may sufficiently satisfy the inquiry.

It is true that Bacon was not himself a physician, in the sense of diagnosing disease and prescribing remedies, but perhaps no one ever predicted so well as he the exact path of development that the profession of medicine must take to regain its true position in the intellectual world. Pliny, likewise, was not a physician, though his *Therapeutics* was a wonderful maze of half-knowledge miraculously misapplied, and yet his *Natural History*, such as it was, maintained its authority as a text-book for sixteen centuries; so, too, Celsus was not a physician, yet between Asclepiades and Galen, no one did so much as he to improve the science of medicine. And we must not forget that for many centuries medicine was considered to be merely a department of philosophy; and while philosophy seems to be able to thrive without medicine, it will some day

come to be realized that medicine cannot fulfil its high mission without the assistance that philosophy alone can furnish. Bacon's suggestion of animal experimentation was timely and fruitful. It had been used irregularly before his time, but it is only within recent years that it has entirely vindicated its right to a high place in the researches of medicine.

THE PRACTICE OF MEDICINE

So much for the state of science and the theory of medicine in the early part of the seventeenth century. In regard to the practice of medicine at that period we must depend partly on indirect and collateral, rather than on direct and immediate, testimony. We must step a little aside and view it through other lenses. And the seventeenth-century literature gives us a large and harmonious idea of the usual and current conduct of medicine, for in addition to its scientific development, it produced some of the greatest names in the literature of the world, Shakespeare and Burton, Sarpi and Bacon, Sir Thomas Browne and Milton, Corneille and Racine, Molière and Cervantes. Still as one must go to Aristophanes for a picture of Athenian morals and customs during his period, so it is in Molière and Lesage that one finds the truest pictures of contemporary physicians and of the relations that they sustained to the people, during the period under investigation.

We must confess that at this time the general attitude toward the profession was one of hostility, and deservedly so. Medicine had not at all kept up with the progress of humanity and civilization. No one had arisen to revive the method or to dispute the authority of Hippocrates. The younger Scaliger, who died

in 1609 and who was a friend of Montaigne and a pupil of George Buchanan, had discredited Galen, whom he styled *fimbriæ Hippocratis*, the fringe of Hippocrates, but Hippocrates was still the ultimate authority in medicine. His hypotheses still ruled, though they were stamped with the name of Galen, and his precepts still prevailed. But shrewd as was his insight and wise as were his precepts, they had held the stage too long. Their spirit was long since gone and nothing but the letter remained. Authority is as fatal to medicine as it is to religion, and medicine at least was still held in subjection to a great name. Molière found in the physicians of his time a delightful field for the exercise of his humor. Indeed, it is said that in the group of physicians who held the curious consultation in *L'Amour Médecin*, the features of the four principal court-physicians are plainly to be discerned. M. Guy Patin in his *Letters* says that Molière "did not even exaggerate the customs of the physicians of his time." To be sure, it might reasonably be objected to this testimony that while M. Patin is willing to vouch for Molière, no one seems to come forward to do the same for him. Still, the portraits of Molière are inherently probable, or M. Patin's evidence alone would be of little value.

"But," said the king one day to the dramatist, "you have a physician yourself, M. Molière. What does he do for you?"

"Sire," replied Molière, "he comes to see me and we talk together. He gives me advice, I neglect to follow it and I get well."

To demonstrate how fully the practice of medicine was drawing its nourishment during the seventeenth century from the inspiration of Hippocrates twenty cen-

turies earlier, I shall translate a few passages from Molière. In *M. de Pourceaugnac* the apothecary extols the rigid observance of the rules of medicine as exemplified by his friend, the physician of the play. He says:

Apoth.—It is not because we are such good friends that I say so, but it is a pleasure, a genuine pleasure, to be his patient, and I would rather die under his care than get well under that of another. For whatever may happen, you may be sure that everything is in proper order, and when you die under his care your heirs cannot reproach you.

Eraste.—That must be a great comfort to a patient.

Apoth.—It certainly is. One is sure of dying methodically. Moreover, he is not one of those physicians who prolong diseases. He acts quickly and loves to dismiss his patients.

In the next scene of the same play the physician, whose praises you have just heard sung, is summoned by a country lad to call on his father who is ill.

Countryman.—Sir, his strength is almost gone, and he says that he suffers the greatest pain in the world in his head.

Doctor.—He is a fool. In the disease that he has it is not in the head but according to Galen in the spleen that he should have pain.

Countryman.—That may be, sir; but, moreover, he has had a diarrhea for six months.

Doctor.—Good! That is a sign that he is loosening up inside. I will go and see him in two or three days, but if he dies before then, do not fail to let me know. It is in no way seemly for a physician to visit a dead man.

Country Girl (running up).—My father, sir, is getting worse and worse.

Doctor.—That is not my fault. I am giving him medicines. Why doesn't he get well? How many times has he been bled?

Country Girl.—Fifteen times, sir, within twenty days.

Doctor.—Fifteen times?

Country Girl.—Yes, sir.

Doctor.—And he is not yet well?

Country Girl.—No, sir!

Doctor.—That proves that the disease is not in the blood. We will then purge him an equal number of times to find out whether it may be in the humors, and if that does not help, we will send him to the baths.

In *L'Amour Médecin*, Lucinde loses her appetite, through disappointed affection, and her father, Sganarelle, calls in four physicians, MM. Desfonandès, Tomès, Macroton, and Bahis, under which names are thinly disguised MM. Desfougeras, Esprit, Guenaut, and Dacquin. The maid Lisette recognizes M. Tomès and says in surprise:

Lisette.—Ah, sir, are you here!

Sganarelle.—You know the doctor, then?

Lisette.—I saw him the other day at the house of the friend of your niece.

Tomès.—And how is her coachman getting on?

Lisette.—Fine. He is dead.

Tomès.—Dead!

Lisette.—Yes.

Tomès.—That is not possible.

Lisette.—It may not be possible, but it is true.

Tomès.—He cannot be dead, I tell you.

Lisette.—And I tell you that he is dead and buried.

Tomès.—You are mistaken.

Lisette.—I saw him.

Tomès.—It is impossible. Hippocrates says that such diseases end only on the fourteenth or the twenty-first day, and it is but six days since he fell ill.

Lisette.—Hippocrates may say what he pleases, but the coachman is dead.

The four physicians then hold their consultation over the indisposition of Lucinde.

(They sit down and cough).

Desfonandès.—Paris is an enormous city, and one must travel long distances for a little money.

Tomès.—I must confess that I have an excellent mule for the road, and one would hardly believe the distance that I ride him every day.

Desfonandès.—And I have a wonderful horse. He is an animal that never tires.

Tomès.—Do you know the distance that my mule has made to-day? I went first down in front of the Arsenal, from the Arsenal to the end of the Faubourg St. Germain, from there to the bottom of the Marais, then to the Porte St. Honoré, then to the Faubourg St. Jacques, afterward to the Porte Richelieu, and from the Porte Richelieu here. And from here I must go to the Place Royale.

Desfonandès.—My horse has gone as far as that to-day besides a journey to Rueil to see a patient.

Tomès.—By the way, what part do you take in the dispute between the two physicians, Théophraste and Artémius? That is a quarrel that is dividing the whole profession.

Desfonandès.—I am on Artémius's side.

Tomès.—So am I. Not but that his advice, as was manifest, killed the patient, nor but that the advice of Théophraste was much better; still, he was wrong under the circumstances, for he ought not to have had a different opinion from the elder physician. What do you say?

Desfonandès.—Certainly. One must always observe the necessary formalities, whatever may happen.

Tomès.—For my part, I am rigid and inflexible unless it be among my friends. One day three of us were called in consultation with an outside physician, when I blocked the whole affair and would not suffer an opinion to be expressed unless due order was observed. The case was urgent, but I refused to give way, and the patient died during the dispute.

Desfonandès.—You gave them a good lesson and showed them their folly

Tomès.—A man dead is only a dead man, and is of no consequence, but a rule neglected brings disrepute on the whole profession.

Sganarelle (rushing in).—Gentlemen, my daughter is getting worse. I beseech you, tell me what you have decided on.

Tomès (to Desfonandès).—It is for you to speak.

Desfonandès.—No, sir. Speak first, if you please.

Tomès.—You are too polite.

Desfonandès.—I will not be the first to speak.

Tomès.—My dear sir!

Desfonandès.—My dear sir!

Sganarelle.—For God's sake, gentlemen, lay ceremony aside. The case is urgent.

Tomès.—Sir, we have with mature reflection, considered the illness of your daughter. My personal opinion is that it proceeds from an undue heat of the blood, and my advice is that she be bled as soon as possible.

Desfonandès.—I on the contrary declare that her illness is due to a decomposition of humors caused by overeating, and my advice is to give her an emetic.

Tomès.—I contend that an emetic will kill her.

Desfonandès.—I am sure that bleeding will put an end to her life.

Tomès.—And this is an example of your ability!

Desfonandès.—It is. I am your superior in every department of learning.

Tomès.—Do you remember the man you killed the other day?

Desfonandès.—Do you recollect the woman you sent to the other world last Tuesday?

Tomès (to Sganarelle).—I have told you my opinion.

Desfonandès (to Sganarelle).—I have given you my advice.

Tomès.—If your daughter be not bled, she will die.
(Exit.)

Desfonandès.—If you bleed her, she will not live fifteen minutes. (Exit.)

Here's a how-de-do! Here's a state of things! Of course this is a comedy, and the daughter was in no danger of death. But it was no comedy to the consulting physicians. Earnest enough in all conscience they were, and sincere enough, too, doubtless, in their opinions. But it was a time when medicine was a reminiscence merely; a dull, blind servility to rule and creed, which had once been alive and generous and beneficent; which was again to become alive and generous and beneficent, but was for the time being the thing that Molière depicted. When in the same play M. Macroton gives his opinion of the daughter's case he adds, with a solemn drawl:

Macroton.—Not that your daughter may not die withal, but at least you will have done something, and you will have the consolation of knowing that she dies according to the rules.

To which M. Bahis hastens to add:

Bahis.—It is better to die according to the rules than to escape death by violating them.

Could pedantry go further? Practical pedantry perhaps could not. Speculative pedantry seems to have no limit, but it reaches its ultimate expression, its highest articulate utterance, in the character of the young physician, Dr. Thomas Diafoirus, in *Le Malade Imaginaire*.

Young Dr. Diafoirus is a suitor for the hand of Angélique, the daughter of Argan. The elder Diafoirus, also a physician, brings his son to the house of Argan for the formal betrothal. After the first ceremonious greetings Diafoirus *père* says to his son:

Diafoirus.—Come forward, Thomas. Make your compliments.

Thomas.—Is it proper to commence with the father?

Diafoirus.—Yes.

Thomas.—Monsieur, I am come that I may salute, recognize, cherish, and revere in you a second father, but a second father to whom I venture to declare myself more grateful than to the first. He indeed begot me, but you have chosen me; he received me by necessity, but you have accepted me by your favor. What I have of him is a work of the body, but what I have of you is a work of your will; and as the faculties of the spirit are above those of the body, so much the more am I indebted to you—so much the more do I prize that prospective relationship in which I come to-day to render you, in anticipation, my very humble and very respectful duty.

When the young lady is called forward to greet her fiancé, he mistakes her for her mother and begins:

Thomas.—Madame, it is with justice that heaven has granted you the name of *belle-mère*, since—

Argan.—That is not my wife, but my daughter, to whom you are speaking.

Thomas.—Where is she?

Argan.—She will come in soon.

Thomas.—Father, shall I wait until she comes?

Diafoirus.—Make first your compliment to the young lady.

Thomas.—Mademoiselle, as the statue of Memnon breathes forth a harmonious sound when it is illuminated by the first rays of the rising sun, so, precisely, do I feel myself animated by a sweet rapture at the appearance of the sun of your beauty; and as the naturalists inform us that the flower called heliotrope turns without ceasing toward that star of day, so my heart will henceforth turn without ceasing toward those splendid stars, your adorable

eyes, as to its single pole. Suffer me then, mademoiselle, to place to-day on the altar of your charms, the offering of my heart, which neither desires nor solicits any other glory than to be, mademoiselle, for my whole life, your very humble, very obedient, and very faithful servant and husband.

In his character as a physician Thomas sustains his promise as a man. His father bestows on him the well-deserved praise "of binding himself blindly to the opinions of the ancients, and of never desiring to comprehend or even to hear the arguments about the pretended discoveries of the century, respecting the circulation of the blood and other opinions of the same paste."

Thomas, that he may be seen to merit his father's eulogy, at once draws a wad of paper from his pocket and offers it to Angélique saying:

I have here a thesis in which I take issue against the "circulators," and, with due permission, I will venture to present it to mademoiselle as the first fruits of my mind. Moreover, also with due permission, I will invite you for your amusement to come, one of these days, to witness the dissection of a subject on which I am to lecture.

Among all these fopperies and affectations of learning, it is refreshing to hear the clear voice of common sense in the utterances of Béralde, the brother of the patient, Argan. Béralde says:

When a physician talks to you of rectifying the blood, of tempering the bowels and the brain, of unloading the spleen, of readjusting the chest, of repairing the liver, of fortifying the heart, of reestablishing and conserving the natural heat, and of possessing the secret of prolonging life beyond the limits of old age, he is singing you the romance of medicine.

But when you come to the test, you will find nothing of all that. These are merely fine dreams, which, when you wake, leave in your mind nothing but disgust at having believed them.

Molière's arraignment of medicine was severe but probably just. Gil Blas, you will remember, learned in a few words all of the art of healing that Dr. Sangrado thought it essential for him to know. Sangrado said:

Other physicians are of the opinion that the healing art is learned by the painful study of a thousand sciences as useless as they are difficult. My intention is to shorten this long road and to save you the trouble of studying physics, pharmacy, botany, and anatomy. Know, then, that to cure all kinds of diseases nothing is necessary but to bleed your patients and to make them drink hot water. This is the great secret for curing all the illnesses on the earth. This marvelous secret, which I impart to you and which Nature has not been able to conceal from my profound observations, while she has remained impenetrable to my companions and colleagues, consists simply of two things, bleeding and hot water, both in abundance. I have nothing more to teach you. You now know the whole of medicine from root to branch, and if you follow my precepts, you will be as great a physician as I am.

Needless to say, so easy a road offered no temptation to stray, and Gil Blas followed it faithfully. His results he did not hesitate to record. He called his visiting list his "mortuary register" or "book of the dead." Rarely did he make a third visit to any patient. What with letting blood and filling them to the throat with copious drenches of hot water, he usually found on going to the house a second time that his patient was

being dressed for interment. He made more widows and orphans than the siege of Troy. One day he addressed Dr. Sangrado:

Sir [said he], I call heaven and earth to witness that I follow your method scrupulously, but for all that, my patients go to the other world. They seem to insist on dying if only to discredit our remedies. To-day I came across two more setting out to be buried.

My son [Sangrado replied], about the same thing happens to me. Seldom do I have the satisfaction of having a patient recover after falling into my hands, and if I were not so sure of the principles that I follow, I should believe that my system is utterly wrong.

If you will believe me [suggested Gil Blas], perhaps it would be well to change our method. Let us try, if only out of curiosity, some chemical preparations, antimony, for example. The worst that could happen could be no worse than we have proved with our bloodlettings and hot water.

I would be glad to do so [replied Sangrado], but for one thing. I have just published a book in which I laud to the skies the frequent use of bleeding and hot water. Shall I discredit my own work? Shall I afford this triumph to my enemies?

Dr. Sangrado is a recognized example of many physicians of the seventeenth century. He represents those of a lower, as the physicians of Molière represent those of a higher, intellectual type during the period that produced them. The more one rises from the Sangrado type, the more complicated becomes the system of practice and that of theory alike.

Ambrose Paré records a favorite fomentation that he used containing sage, rosemary, thyme, lavender, chamomile, melilot, and red roses, boiled in white wine. He says:

When I was in Turin, I found a surgeon famed above all the rest for his treatment of gunshot wounds, into whose favor I found a way to insinuate myself, that I might have the recipe of his balm, as he called it, wherewith he dressed these wounds. And he made me pay my court to him for two years before I could possibly get the recipe out of him. In the end, thanks to my gifts and presents, he gave it to me, which was this, to boil down, in oil of lilies, young puppies newly born and earthworms prepared with Venice turpentine. Then I was joyful and my heart made glad that I had learned his remedy.

Montaigne, a contemporary of Paré, who also lived nearly into the seventeenth century, says in his essay on *The Resemblance of Children to Their Fathers*:

I was the other day in company, where one of my fraternity [that is, one of those who like him were afflicted with stone] told us of a new sort of pills made up of a hundred and odd ingredients. It made us very merry and was a singular consolation, for what rock could withstand so great a battery? And yet I hear, by those who made trial of it, that the least atom of gravel will not stir for it.

The record and report of cases, as Bacon notes, were almost entirely neglected by the physicians of the time. Hospital reports, so far as I can discover, were not yet issued. In 1657, however, appeared a book by Dr. John Hall entitled *Select Observations on English Bodies, or Cures Empirical and Historical Performed on Very Eminent Persons in Desperate Disorders*, from which much valuable information may be obtained as to the treatment of disease in the period we are considering. It is necessary to note that the rather pretentious title of the work was not chosen by Dr. Hall himself, who had been dead twenty-two years before the record of his

cases was published by Dr. James Cook. Dr. Hall was the son-in-law of William Shakspere, and was considered a very skillful and learned physician. The registration of his burial indicates this. The entry is simply in these words: "1635, Nov. 26. Johannes Hall, Medicus peritissimus."

This book is a record of his cases. One I shall reproduce, since it has the additional interest of recording an illness of his wife, Susanna, Shakspere's daughter.

Observation XXXIII.—My wife was troubled with the Scurvy, accompanied with pain of the Loins, Corruption of the Gums, Stinking Breath, Melancholy, Wind, Cardiac Passion, Laziness, difficulty of Breathing, fear of the Mother [*i.e.*, of hysteria], binding of the Belly and torment there, and all of a long continuance, with restlessness and weakness. There was given this bolus: Rx Electuary of Tamarinds 3 ss; Cream of Tartar 3 i. To the Back was applied.

Emplastrum Oxycroceum, which freed her from pains of the Loins and Belly, Feby. 9, 1630. The tenth day, taking cold, she had again miserable pain in her joints so that she could not lye in her Bed, insomuch as when any helped her, she cried out miserably; for which I used this Ointment:

Rx Capon's Grease, oil of Sweet Almonds, of Dill and Roses, Mucilage of the Roots of Althea, drawn with Mallow Water each 3 i. Mix them. After anointing, theforesaid Plaster was applied with good success, for she was quieter all night; but yet in the morning she was troubled with wind. Then I gave her of Sennurtus's Electuary, which is thus framed: Rx The Conserve of the tops and leaves of Scurvy Grass 3 iii; the flowers of Bugloss, Clove, Gilly-flowers, and Damask Roses, each 3 ss. The flesh of Candied Nutmegs, Citron Pills, candied and cut, each 3 i; Honey of Juniper Berries 3 iii; Confectio Alkermes 3 ss; Syrup of Cinnamon, Syrup of Scurvy Grass or that of Forestus, sufficient to make an

electuary, to which was added Oil of Sulphur, sufficient to sharpen it. For the constipation of the Belly was used this suppository: ℥ Honey ʒ i; Spec. Hiera Picra ℥ ii [this was aloes and canella]; Troch. Alband ℥ ss; Cummin Seed ʒ ss. Make a long suppository. For the cardiac passion was used Elect. Pleresarchon, Dose ʒ ss fasting. Yea, at any hour it was used, drinking the following stilled wine after it. ℥ Fumatory, Brooklime, Watercresses, Scurvy Grass, Betony, Agrimony, Hart's-tongue, each M. ss [*i.e.*, one-half manipulus or handful]; Bark of Capparis Ash, Tamaris each ʒ ss; Roots of Elecampane, Polipody, each ʒ iii; Madder Liquoris, Calamus Aromaticus, Eringoes each ʒ ss; Yellow Sanders, Red Coral, Shavings of Ivory, each ʒ vi; Cloves, Mace, Cinnamon, Ginger each ʒ iii; Ceterach, Flowers of Broom, Rosemary, Marigolds, Epithyme each. P. i [*p* = pugillus, an eighth part of a manipulus or handful]; Juniper Berries ʒ i; Steel prepared according to Crato ʒ iv; White Wine lb. viii, etc. [Then followed minute directions about boiling and stirring and straining.] Dose is two to three spoonfuls in the beginning, which may be increased if there be need. And by these she was cured.

To-day the treatment would be lime-juice and spinach, with a mouth wash of potassium chlorate.

The orvietanum, theriaca, or Venice treacle contained sixty-one different ingredients, some of which were mutually antagonistic and many therapeutically incompatible.

Belief in spells, charms, incantations, amulets, and talismans was then universal. A cure for the ague consisted in baking a cake of bran with salt and, when the fit came on, giving it to a dog, whereby the malady was supposed to be transferred from the patient to the animal. For the toothache: "Take a pece of whyt Brede and say over it the Pater Noster and make a cross upon the Brede, then lay that pece of Brede

unto the Toth that aketh or unto any other sore; tournynge the Crosse unto the Sore or Dysease and so is the persone healed." A baked toad hung in a silk bag about the neck was considered a certain charm against scrofula. In the Diary of Elias Ashmole, the following record is made under the date of April 11, 1681: "I took early in the morning a good dose of Elixir and hung three Spiders about my neck, and they drove my Ague away. Deo gratias!" Hernia was cured by drawing the patient through a split tree, after which the tree was bound, to make it unite in its natural shape and as the tree grew together the hernia became cured. A headache was quickly relieved by tying about the patient's head the halter in which a malefactor had been hanged. This was considered so efficacious that many an unseemly contest occurred in the scramble for pieces of rope after the criminal was cut down. Many similar cures are recorded by Burton without condemnation if not with approval, and Francis Grose has preserved an inconceivable number of like instances. On January 16, 1665, Pepys writes:

Homeward, in my way buying a hare and taking it home, which arose upon my discourse to-day with Mr. Batten who showed me my mistake that my hare's foot hath not the joyst to it; and assured me he never had his colique since he carried it about him; and it is a strange thing how fancy works, for I no sooner handled his foot but I become very well and so continue.

On March 26th of the same year he records:

I never was better in my life. Now I am at a loss to know whether it be my hare's foot which is my preserva-

tion; for I never had a fit of the colique since I wore it, or whether it be my taking a pill of turpentine every morning.

Such are a few of the simples that went to make up the *Materia Medica* of the seventeenth century. Their efficacy, within certain limits, is not to be denied, and curiously enough we find the explanation of their efficacy in one who himself witnessed and affirmed it. Ramsay in his *Helminthology* (1668) says:

Neither doth Fansie only cause but also as readily cure Disease; as I may justly refer all magical and jugling Cures thereunto, performed, as is thought, by Saints, Images, Relicts, Holy-Waters, Shrines, Avemarys, Crucifixes, Benedictions, Charms, Characters, Sigils of the Planets, and of the Signs, inverted Words, etc.; and therefore all such Cures are rather to be ascribed to the force of the Imagination than to any virtue in them.

We are fully entitled to ridicule the credulity of the seventeenth century, but a discreet man will first take the rabbit's foot or the horse-chestnut from his own pocket, and discard the amulet from his own neck; acknowledging at the same time that a coral necklace cannot avert night terrors from children, nor a string of Job's tears prevent babies from feeling pain when their teeth appear.

Those were halcyon days for the apothecaries. Dr. Gideon Harvey, physician-in-ordinary to his Majesty Charles II., wrote in 1676, in *The Family Physician and the House Apothecary*, some comments on their profits from drugs:

I have oft seen bills of apothecaries risen to twenty pounds and sometimes thirty pounds in the time of a fortnight; I have known an apothecary's bill so extravagant that the

sum at the bottom of his account amounted to fifty pounds in the space of thirty days. Not long since an apothecary of our suburbs brought in bills to nine patients for less than three-quarters of a year's physick, amounting to fifteen hundred pounds.

This is a sum almost equivalent in purchasing power to \$25,000 to-day, and would amount to about \$1000 a month per patient. George Butler charged in his bill (in 1633) \$7.50 apiece for some pills that he put up for Mrs. Style who had a sore leg. She took three and died during the night. Goodall gives many similar instances in *The Physicians of London*, 1684. A Dr. Tenant took the precaution of dispensing his own medicine—a degrading thing for a physician in the seventeenth century to do—and in his bill “he charged for one pill at six pounds, and an apozeme [decoction] at the same price.”

RIVAL CLAIMANTS TO HARVEY'S DISCOVERY

It is well known that others before Harvey had worked in the same field and had had stray gleams of the truth without attaining to a full comprehension of it. This list does not, speaking strictly, include the name of Vesalius, and yet the spirit that Vesalius invoked was of far-reaching importance. It extended beyond the realm of anatomy and laid hold of the true scientific method. It consisted in the recognition of the fact that science must be free, must disclaim tradition, and throw off the chains of authority. Before Vesalius came, the students in anatomy studied not the human body but Galen, as the students in theology studied not the Bible but St. Thomas Aquinas. Martin Luther was still living when Vesalius's great work on

The Structure of the Human Body appeared in 1543. It is not likely that he ever saw a copy of it, and he would probably have had little interest in it if he had seen it; and yet what Luther had accomplished in freeing the individual conscience from the shackles of tradition, Vesalius almost emulated in freeing science from the authority at once of Galen and of the Church. To him all science owes a debt of profound gratitude, for as Luther was the father of Vesalius, so Vesalius was the father of Harvey.

Before Vesalius, then, the teaching of anatomy consisted in the discovery of new meanings and new interpretations of Galen, and rarely in actual dissections. Vesalius brought to anatomy the practice of careful observation, and established the method on which physical science has since his time advanced in its uninterrupted course—the method of dissection as opposed to interpretation, of observation as opposed to authority. He raised aloft the book of Nature in place of the book of Galen, and opened up a new path in scientific work.

On the publication of the *Fabrica*, the pall of authority was once and forever removed. His results were impugned and indeed corrected by his followers and rivals, but they were impugned and corrected by the method that he had introduced. The authority of Galen ceased to be invoked as the ultimate test of fact.

The era of experimental science, thus inaugurated in 1543, followed the principle of induction which is now known to have guided the reasoning of men from primitive time. That principle Bacon merely formulated and systematized. That too was a great service, as it then became a conscious and understood process of

reasoning, a weapon of thought and the key to modern science. It is true, as I have remarked, that before Vesalius, medicine had been a branch of philosophy, and that afterward it became one of the physical sciences; but it is also true that with him the method of physical science had its origin.

To realize the importance of Harvey's theory, which opened up the channel to physiology and modern medicine, sweeping away the barrier that obstructed at its source the stream of medical science, we must for a moment examine the belief thus effectually destroyed. Foster¹ summarizes this as follows:

The parts of the food absorbed from the alimentary canal are carried by the portal vein to the liver and are there converted into blood; here also the blood becomes endued with the natural spirits. From the liver it passes by the vena cava to the right ventricle, whence some of it passes through innumerable pores, like a sieve and invisible after death, to the left ventricle. As the heart expands it draws from the lungs, through the pulmonary vein, air into the left ventricle. This air, with the blood which has percolated into the left ventricle from the right, becoming subjected to the action of the innate heat of the heart, which is the source of animal heat, is elaborated into the "vital spirits" which flow from the left ventricle through the arteries to all parts of the body, flowing and ebbing through the same vessels, and having no connection with the blood in the veins save through the pores between the ventricles. Similarly the blood in the veins, bearing the "natural spirits," flows and ebbs from and to the right ventricle, passing into the lungs through the pulmonary artery and to all the parts of the body. The "vital" spirits produced in the left ventricle from the air and the few drops that enter from the right

¹ Foster, Sir Michael, *Lectures on the History of Physiology*, Cambridge, 1901.

ventricle are of a higher and more elaborate development than the "natural spirits" with which the venous blood is endued. There is still a third elaboration, of "vital spirits" into "animal spirits" in the brain, which, without any admixture of blood, are carried in a similar ebb and flow along the nerves, which were thought to be hollow during life and to close at death.

Such, briefly, was the philosophic conception of the circulation that with various glosses (among which may be mentioned a dispute as to the time of the ebb and flow, many physicians believing that the blood flowed all day and ebbed at night) and interpretations held the scientific mind in bondage for many centuries. To this ebb and flow the term circulation could in no strict sense be applied. It was not a circulation but rather a passing of the blood to and fro. It seemed necessary to describe in detail, however briefly, this long-prevalent belief, since on an indistinct comprehension of it has arisen some uncertainty as to Harvey's right to the title of discovery of the circulation. On the words of Brutus to Portia,

You are my true and honorable wife,
As dear to me as are the ruddy drops
That visit my sad heart,

the claim was founded that Shakespeare had divined the truth before Harvey. This claim was made by Thomas Nimmo, and was published in the second volume of the *Shakespeare Society's Papers*. It is of course worthy of no consideration whatever.

The history of science presents no more interesting picture than the manner in which the way was smoothed to Harvey's discovery. Robert Boyle, a friend of Harvey and an eminent scientist himself, since he dis-

covered the law of elasticity of the air, narrated the circumstances that led up to Harvey's discovery. He says:

I remember that when I asked our famous Harvey, in the discourse which I had with him a little while before he died, what were the things that induced him to think of a circulation of the blood, he answered me that when he took notice that the valves in the veins of so many parts of the body were so placed that they gave free passage to the blood toward the heart, but opposed the passage of the venal blood the contrary way, he was invited to think that so provident a cause as Nature had not placed so many valves without design; and no design seemed more probable than that, because the blood could not well, because of the intervening valves, be sent by the veins to the limbs, it should be sent by the arteries and return through the veins, whose valves did not oppose its course at all.

The first step, however, was taken by Vesalius, and touched on the invisible pores that led a portion of the blood directly from the right ventricle to the left. In describing the heart he says:

The septum of the ventricles, the thickest substance of the heart, abounds with little pits impressed on it on both sides. None of these can be perceived to penetrate the septum, however, and we are compelled to wonder at the handiwork of God, if it be true that the blood sweats from one ventricle to the other through passages which cannot be detected by the eye.

Vesalius thus dared to doubt the prevalent belief. The next step was taken by Servetus who notes that:

There is no passage through the septum of the heart, but the blood is driven by a long passage through the lungs. It

is in this passage rendered light-colored and from the pulmonary artery is poured into the pulmonary vein. Here it is mixed with the inspired air and by expiration is cleansed from its fumes. And so at length it is drawn in, a complete mixture, by the left ventricle through the diastole, stuff fit to become the "vital spirits."

The size of the pulmonary artery convinced him that it served some other purpose than the mere nutrition of the lungs, and the passage given shows that he had grasped something of the truth as to the pulmonary circulation. But the full significance even of the pulmonary circulation was not seen by Servetus. He merely intended to correct the opinion of Galen, and considered that only that portion of the blood which Galen had believed entered the left ventricle from the right by a process of transudation was what the pulmonary artery transmitted to the left ventricle through the pulmonary vein, while the rest of the blood fetched its round through the venous system every twenty-four hours. This was a step forward; but it was by no means the final recognition of the truth, even as to the pulmonary circulation.

The fate of Servetus was a sad one. The passage just quoted is from his *Christianismi Restitutio*, a work on popular theology. He had written an earlier book on *The Errors in the Doctrine of the Trinity*, for writing which he barely escaped the clutches of the Inquisition; while for this, his second work, he was seized and prosecuted by Calvin and burnt at the stake in 1553. He died at the age of forty-two, the Giordano Bruno of Calvinism.

Colombo, who was the professor of anatomy in Rome when he died in 1559, left in manuscript a book which appeared after his death, in which he appropriates the

work of both Vesalius and Servetus without any addition of note to either. He differs from Vesalius in one point, however, which alone would invalidate any claim he might have. "He opposed Vesalius in regard to the origin of the vena cava, asserting that it takes its rise from the liver, and not from the heart as the great reformer in modern anatomy had mentioned."¹ This is taken directly from Hippocrates' own words. In his book on *Aliments*, he has said that "the root of the veins is the liver and the root of the arteries is the heart." Yet Colombo's work on *Anatomy* was of service in that it gave currency to the exposition by Servetus of the pulmonary circulation. In 1571, the *Quæstiones Peripateticæ* of Cæsalpinus appeared. In this book he touched the very center and secret of the circulation—he touched it, but he withdrew his hand too soon. Not even to him was the full theory of the circulation revealed. His words are full of interest:

Of the vessels ending in the heart, some send into it the material which they carry, for instance, the vena cava into the right ventricle and the pulmonary vein into the left; some carry material away from the heart, as the aorta from the left ventricle, and the pulmonary artery, nourishing the lung, from the right. To each orifice are attached little membranes (valves) whose function is to secure that the orifices leading out do not let the blood in, and that those leading in do not let it out. It follows that when the heart contracts, the arteries are dilated and when it expands they are constricted. For if the arteries were dilated and constricted at the same time with the heart, it would follow that they would be dilated at the time when the material filling them from the heart was denied them, and constricted at the time when material was flowing into them from it.

¹ Willis, Thomas, *Life of Harvey*.

But this is impossible. They therefore dilate and contract in alternation with the action of the heart.

How fine and clear this is! And it is the earliest description of the heart's action in "emptying itself during systole into the aorta and the pulmonary artery, and filling itself during diastole from the vena cava and the pulmonary vein."

Twenty-two years later, in 1593, another book entitled *Quæstiones Medicæ* appeared from the hand of the same writer. In this he approaches still nearer the truth without fully perceiving it. In it he calls attention to the fact that veins when ligatured swell on the far side and not on the near side of the ligature. "But exactly the contrary ought to happen," he says, "if the movement of the blood and the spirits took place in a direction away from the heart to all parts of the body. When a channel is interrupted, the flow beyond the interruption ceases; the swelling of the veins therefore ought to be on the near side of the ligature."

"Why isn't it?" he seems to ask himself. Indeed he gives the answer, but he does not fully comprehend it when given. The explanation he cannot yet make. The circle is not complete. It almost seems to us that he has given the explanation and as if the circle of the blood were complete, but that is because we look through our own eyes and not through those of Caesalpinus. He betrays himself at the very moment when we expect the final word of full comprehension. He continues:

Now when we are awake the movement of the native heat takes place in the outward direction, but when we are asleep it takes place in the contrary direction toward the heart. We must therefore conclude that when we are awake a

large supply of blood and of spirits is conveyed to the arteries and thence to the nerves. When we are asleep, however, the same heat is carried back to the heart, not by the arteries but by the veins. For the natural entrance into the heart is furnished by the vena cava, not by the arteries. For in sleep the supply of native heat to the arteries is diminished, but it bursts into them with vehemence when we wake, while the veins are more swollen when we are asleep and shrink when we wake, as any one may see who watches the veins in the hands. When we are asleep, the native heat passes from the arteries by that communication of orifices which we call anastomosis into the veins and so to the heart.

While I have somewhat condensed the statements of Cæsalpinus in these quotations, yet I have been careful to leave every argument and every description, unshorn of its strength, in all its directness and in all its logical force, as fully as an advocate could have done in his behalf. But when all is considered, it is too little to establish his title. He apprehends the circulation, but he does not comprehend it. He sees the riddle but he does not solve it. He meets the truth full in the face, but he passes it by without recognition. He translates all the words, but he cannot put the sentence together.

And all this is because, while Cæsalpinus seemed to hate the very name of Galen, while he declared himself willing to "maintain that everything that Galen affirmed was wrong and that everything that Galen denied was right," while he fancied that he had entirely emancipated himself from the control of the traditions of the ancient fathers in medicine, he yet saw through Galen's glasses, he was yet in the gall of bitterness. Dr. Thomas Willis, in his preface to the works of Harvey, says that the later meaning is apt to be read into the

earlier words, and does not really represent the thought that was in the writer's mind as he wrote, but that which is in our minds as we read; moreover, "The world saw nothing of the circulation of the blood in Servetus, Colombo, Cæsalpinus, or Shakespeare, until after William Harvey had taught and written."

Fabricius, a younger contemporary of Cæsalpinus, had tried to fathom the purpose of the valves in the veins. He said:

In my opinion they are formed by Nature in order that they may to a certain extent delay the blood, and so prevent the whole of it flowing at once like a flood either to the feet or to the hands and fingers, and becoming collected there. For this would give rise to two evils: on the one hand the upper part of the limbs would suffer from want of nourishment, and on the other the hands and the feet would be troubled with a continual swelling. In order therefore that the blood should be everywhere distributed in a certain just measure for maintaining the nourishment of the several parts, these valves of the veins were formed.

These words of Fabricius, the greatest anatomist of his time, show how little impression Cæsalpinus had made, and how far his pupils were from understanding the truth concerning the circulation. That was because he did not himself understand it.

A claim has also been entered for the credit of the discovery of the circulation in the name of Paolo Sarpi, but such a claim seems impossible to substantiate. Sarpi was an intimate friend of Fabricius and of Harvey as well, and of Galileo and Lord Bacon and many other men who were eminent during the early years of the seventeenth century. His name is perhaps as illustrious as that of any of his contemporaries, but his laurels

were not won in the field of the physical sciences, and the validity of the claim that has been brought in his name, as anticipating the discovery of Harvey, is not capable of demonstration. Sir Michael Foster says:

His claim is urged by Cornelius Consentinus, on whose statement alone it rests. Consentinus said that Sarpi, who was indeed versed in anatomy as in all the knowledge of his time, left among his manuscripts a theory of the circulation that proves his prior perception of it; and that he disclosed the fact to Fabricius who in turn informed his pupil Harvey. But Sir George Ent narrates the story differently. He says that the Venetian ambassador brought with him from London to Venice a copy of Harvey's book, a part of which Sarpi transcribed into his own note-book without any thought of claiming the credit of the discovery. This note-book, after his death, was found among his papers, and a claim entered in his name which he himself would never have sanctioned.

Candor, however, constrains us to remark that there is a strange and disquieting anachronism in this statement, clear and conclusive as it seems. Sarpi died in 1623, and Harvey's book did not appear until 1628. If to Harvey were granted the privilege of posthumous prayer, and if he continued after death to take an interest in the little triumphs of humanity, he might well ask to be delivered from the friendly offices of Sir George Ent and Sir Michael Foster. From erroneous premises to deduce a conclusion that shall be true, indicates the commission of a fatal fallacy, and constitutes a sharp attack on the truth itself. At the least, its detection suffices instantly to disable the argument. Not on false witnesses and an inaccurate chronology must be based the verdict in the case of Sarpi, but on

the inherent improbability of his claim, on its lack of contemporaneous influence, and on the fact that it was never substantiated at the time, when the outcry against Harvey was so great that nothing was left undone that malice could suggest to invalidate his title to a discovery that envy sought to disparage, and enmity labored to annul.

We have thus examined the pretensions of all the claimants who are entitled to consideration except one, and his claim cannot be examined, although it is in point of time the earliest of all. While a Christian emperor yet occupied the throne of Constantinople, Leonardo da Vinci was born near Empoli, in Tuscany. He was a man of most remarkable wisdom. There were few fields of learning in which he was not eminent. His *Last Supper* is considered one of the two greatest paintings in the world; his *La Gioconda* is the most famous canvas that was ever painted. In mathematics, botany, anatomy, fortification, geology, and engineering he was intimately skilled, and in some of them was centuries ahead of his time. He anticipated Bacon's recognition of observation and experience as the basis of all reasoning in science; he explained the theory of mechanical forces; many years before Copernicus he was acquainted with the annual motion of the earth; he described the camera obscura, the use of the iris, the mechanism of flight, and the nature of colored shadows. He kept copious note-books, most of which have never been examined. They yet exist in manuscript, and the character of his claim to have anticipated Harvey must await the day when these old manuscript note-books may be deciphered. There is some hope that when that day comes, our knowledge of the mechanics of aviation will become illuminated, but there is no probability that

another chapter will be added to the dispute concerning the circulation.

Such are the various claims that seem to threaten, however remotely, the title of William Harvey, and we have found them all insufficient to raise even a presumption of doubt as to its validity.

HARVEY AND SYDENHAM

Of the theory itself of the circulation I shall not have to speak in detail. The children of to-day in the intermediate grades of the public schools know better than the great teachers of anatomy, whom I have mentioned, the course of the blood from the left ventricle through the arteries, capillaries, and veins back in a circle to the right ventricle and through the lungs. Indeed, they know it better than Harvey himself knew it, for even to him a complete demonstration was denied, since it was not until 1661 that Malpighi observed with a microscope the passage of the blood through the capillaries, whose continuity with the arteries and veins Marchetti finally proved by injecting them. Harvey affirmed his conviction that such a communication must exist, but it was on this ultimate demonstration that his discovery finally rested.

The effect of Harvey's publication on his own life and on his practice possesses but little interest for us now. How he was buffeted and abused and reviled is a matter of personal record that I, fortunately, shall not have to transcribe. Something of the same feeling, though far less bitter and less enduring, was expressed 245 years later toward Lister, when he first announced his belief in wound-infection. His own university (the University of London) regarded him as a heretic,

and the earliest recognition that he received came to him from the countrymen of Pasteur and from those of Virchow. The whole miserable story concerning Harvey is better forgotten.

The effect, however, on the theory of medicine was startling enough. The whole structure was shaken and much of it was destroyed. The theory of "natural spirits," of "vital spirits," and of "animal spirits" disappeared from medical terminology, though the phrases remained embalmed in current speech. The doctrine of the humors, once so predominant, gradually faded into insignificance; Galen was discredited, and the tyranny of authority was forever broken; the four elements, earth, air, fire, and water, and their four conditions, hot, cold, moist, and dry, began to give place to a new conception of the working of the body, and physiology, the study of vital functions, came for the first time under experimental observation. Picquet, at Montpellier, in 1647 traced the lacteals to the receptaculum chyli and demonstrated that the thoracic duct empties into the left subclavian vein; Peyer and Brunner discovered the intestinal glands; Schneider proved that the nasal mucus came from the membrane lining the nostrils and not from the brain through the cribriform plate; Wirsung found the duct of the pancreas; Highmore described the structure of the testicles and the seminal ducts, and Needham studied the functions of the ovaries. The tourniquet was invented by Morel during the siege of Besançon in 1674, and the obstetric forceps was invented by Peter Chamberlain about 1630. The progress that medicine made in the seventeenth century was marvelous. The discovery of the circulation was found to be the key to whole departments of medical knowledge.

The respiration still remained a mystery. It had been thought that as the heart and stomach possessed an innate principle of heat, so the lungs possessed an innate principle of expansion. Other principle there seemed not to be, though the action of the intercostal muscles had been observed. Jan. 22, 1666, Pepys noted in his diary: "The first meeting of Gresham College since the plague. Among other fine discourses, what pleased me most was Sir G. Ent" (then president of the College of Physicians), "about respiration; that it is not to this day known or concluded on, among physicians, nor to be done either, how the action is managed by Nature or for what use is it." Yet at this very time Borelli was studying the resemblance between the action of inspiration and that of the so-called vacuum pump, then recently (1654) invented by Guericke. Borelli was a professor of mathematics in Pisa for some years before his death in 1679. Of course this analogy in no sense constituted an adequate theory of respiration, for which 150 years must yet pass before the air inspired could be understood chemically, and the absorption of oxygen and the elimination of the products of combustion noted and measured. In fact, it was not until 1837 that Heinrich Gustavus Magnus published in the proceedings of the Berlin Academy of Sciences the complete solution of the process of respiration as we to-day understand it. And yet Borelli's pump-theory of respiration was as great an achievement as was Guericke's pump itself, which superseded the screw of Archimedes.

In the early part of the seventeenth century, then, medicine was a child clinging to the skirts of philosophy. Bacon was a philosopher; Cæsalpinus, although he was physician to Clement VII., was a philosopher of emi-

nence. Linnæus acknowledged his obligations to Cæsalpinus, whose range was almost universal. Cæsalpinus taught that the world could be reduced to two principles, God and matter, and that all finite intelligences, the human soul, and angels and demons, belonged to the realm of matter. Nothing could be bolder than his philosophical speculations. He was a consistent materialist. Sarpi was a theologian and philosopher rather than a physician. Descartes wrote much on medicine. Locke was engaged in the practice of medicine when he wrote his constitution for South Carolina. Two years earlier, in 1667, he was physician to the Earl of Shaftesbury, in whose family he resided. Dugald Stewart said of Locke:

No science could have been chosen, more happily calculated than medicine, to prepare such a mind as his for the prosecution of those speculations which have immortalized his name: the complicated and fugitive and often equivocal phenomena of disease, requiring in the observer a far greater portion of discriminating sagacity than those of physics properly so-called; resembling, in this respect, much more nearly the phenomena about which metaphysics, ethics, and politics are conversant.

In such hands, however, the practice of medicine could not become developed. Even Harvey seemed to fail in this respect, although it is a difficult task to estimate his professional worth as a physician on account of the deluge of abuse with which his enemies sought to overwhelm him. This result he himself foresaw. "I not only feared injury to myself," he wrote, "from the envy of individuals, but I trembled lest all mankind should become my enemies." Dr. Gabriel Harvey, Spenser's evil genius, was eighty-three years old when

William Harvey's book was published. While conceding that his namesake was a very fortunate anatomist, Gabriel Harvey maintained, in the seventeenth-century Latin, that William Harvey was in no repute whatever as a physician.¹ Gabriel Harvey says that his namesake was unskillful enough to give Lord Rainton a purge so powerful that "one-half of it operated eighty times, and the whole dose would probably have sent the patient to Hades." Aubrey said of William Harvey that "though the profession would allow him to be an excellent anatomist, yet I have never heard that any one admired his therapeutic way." Harvey himself said that after his book on the circulation of the blood came out, he "fell mightily in his practice, and was believed by the vulgar that he was crack-brained, and all the physicians were against him." Among his contemporaries, as Dr. Johnson says of Blackmore, he was much oftener mentioned by his enemies than by his friends.

But at the very time, June, 1645, when Dr. Harvey was occupied during the battle of Naseby in watching over the infant children of King Charles, there was a young man fighting under the command of Cromwell who was destined to represent the very best and highest traditions of the profession of medicine—destined to perpetuate the spirit of Ambrose Paré and to transmit it unimpaired to Haller and to Boerhaave. Having given a passing glance at the spirit of medical ignorance as exemplified in Dr. Sangrado and at the spirit of medical vanity and intolerance as illustrated by the physicians whom Molière described, there seems a necessity to fill out the picture of the practice of medicine in the seventeenth century by saying a few words

¹ *Felicissimus anatomicus, licet medicus nequaquam insignissimus.*

of one of the exponents of its scientific and humanitarian spirit. This exponent is Thomas Sydenham.

Sydenham was born in 1624, two years later than Molière and four years before William Harvey's theory was given to the world. He came of an excellent family, that of the Sydenhams of Dorsetshire; and in 1642, at the age of eighteen, was entered as a commoner of Magdalen College, Oxford. Already the civil war between Charles and the Parliament had begun with the battle of Edgehill, and Sydenham left Oxford shortly after his entrance and enlisted in the army of the Parliament, in which two of his brothers also served, the eldest, William, holding a commission as colonel under Parliament. The Earl of Clarendon notes the general disaffection of Dorsetshire to the King's cause.

June 14, 1645, the battle of Naseby was fought, which put an end forever to the king's hopes of success in war; and on May 5, 1646, Charles surrendered his person to the Scots at Newark, only to be handed back by them to Parliament and to be imprisoned in Holmeby House. Sydenham, then twenty-two years old, laid down his musket and returned to Oxford. The war was finished. There is some interest in noting that John Bunyan had shouldered his musket and marched in the same rank with Sydenham.

In 1648, he took his degree of M.B. without having taken the preliminary degree in arts. There is a tradition that he afterward spent some time in study in Montpellier—how long we cannot discover—after which he returned to London and engaged in the practice of medicine. From the humble obscurity of the first years of his practice we can glean nothing of interest. The date of his first achievement is May 7, 1666, eighteen years after he had taken his bachelor's degree

in medicine, and consists of a notice in the transactions of the Royal Society, then in the second year of its existence, reviewing his first work, entitled *A Method of Curing Fevers, Based on my Own Observations.*¹ The principal interest of this work to-day does not consist in his classification and treatment of fevers, but in his revelation of himself. What was the last thought in his mind in writing it, is our first thought in reading it after 246 years, for what he thought is of less value than what he was. His prescriptions are not of much use to us. No one would think to-day of treating a case of intestinal obstruction, for instance, by applying a split puppy, hot, to the abdomen, but his method is perennially instructive. After all, it is not what a man knows but what he is that counts.

He possessed a clear insight into the significance of the various symptoms of disease. He considered carefully their relative values. This is one of the highest qualities of the human mind. It is what constitutes sanity. Not merely the most conspicuous symptom impressed him, but the most important—the one about which all the others were grouped—the cardinal symptom. As he says himself: “It is important in describing any disease, to consider the constant phenomena apart from the adventitious or accidental ones.” These constant phenomena were what constituted the exact recognition of disease. The others he did not neglect, but he rightly regarded them as of subsidiary importance. This is a true method of observation.

His mind was remarkably free from the influences of superstition and from the stifling traditions of the ancient masters. He was not uninfluenced by the beliefs of his time—who of us is?—but when the ac-

¹ *Methodus Curandi Febres, Propriis Observationibus Superstructa.*

cepted theories of disease were disproved by his experience, they ceased to direct his practice. We have rightly discarded almost all of the theories that were then current—we no longer believe, for example, that the plague was sent as a punishment for moral offenses; we no longer believe that small-pox is due to an atmospheric concoction of noxious vapors; we seem to have touched bottom in our explanation of malaria and of yellow fever; but in spite of Sydenham's faulty theory of disease, or rather in spite of the inadequate etiology of his time, it is probable that few physicians of to-day equal him in the accuracy of his observation, and that none would excel him in the skillful adaptation to the treatment of disease of the few and imperfect means at his disposal. He was obliged to rely on himself for many things. He was a fortunate man. He had no clinical thermometer, no stethoscope. The analysis of the urine consisted in an appeal to the sense of taste. There was no general recognition of the significance of the pulse-rate. Howell says, "Some pulses have been known to beat thirty thousand times an hour in acute fevers." In 1666, the year when his book on *Fevers* appeared, and the year when Molière's *Misanthrope* was written, Sir George Ent maintained that "the urine was not borne to the kidneys through the veins but through the nerves."

No one ever cured so many diseases with such inadequate resources. This is the highest praise that can be given to a man, and Sydenham merits it. "It is one of the elements of his superiority," says Latham in his *Life of Sydenham*, "that he looked out for his cases more watchfully, looked into them more closely, and appreciated better the facts that they disclosed, than his fellows did." He never allowed his theories of dis-

ease to obscure his attentive observation of symptoms, or to come between him and his patient's welfare, for his purpose was to cure them. There is an unmistakable strain of exaltation in his voice when he records the recovery in a serious case. It is manifest that his whole heart was in his work. There is an intense sincerity in him. In the Koran there are condensed utterances where a whole thought is expressed into a single word. It is a witness to Mohammed's supreme conviction. "Assuredly," he says, and stops there. It is sufficient. So Sydenham attests his own earnestness in emphatic phrases. "Observe this watchfully," he says, to impress his thought on the reader; and again, "This I have proved by abundant experience," or "This must not be forgotten," or "Carefully attend to this." Such sentences are luminous.

Then again there is an excellent humility in him, which reminds us of Ambrose Paré's constant utterance, "I dressed him and God cured him." Sydenham is full of the same spirit of piety. "We have good reason for believing," he wrote, "that there are certain sorts of fever which Nature cures by a way of her own"; and again: "The disease must be attacked easily and, as far as its nature will allow, must go off of its own accord." "We now come," he says again, "to consider what our efforts must be to assist Nature in the elimination of the morbific matter, in her own way and after her own fashion." "Meanwhile," he records in his report of a case of continued fever, "I watched what method Nature might take, with the intention of subduing the symptoms by treading in her footsteps. Now while I so watched the disease, it departed; slowly and safely—still it departed. I often think," he reflects, "that we move more hastily than we ought to do,

and that more could be left to Nature than we are at present in the habit of leaving her. To imagine that she always wants the aid of art is an error." It needed some courage to write that in the seventeenth century. From all these observations he drew a wonderful truth, whose statement alone would entitle him to a high place in his profession. It is this: "A fever is Nature's engine which she brings into the field to remove her enemy."

One would scarcely look in an essay on *Dysentery* with the expectation of finding a lyric utterance, and yet that is where he sings the praises of opium. He says:

And here I cannot but break out in praise of the great God, the giver of all good things, who hath granted to the human race, as a comfort in their afflictions, a medicine of the value of opium, either in regard to the number of diseases that it can mitigate, or its efficacy in extirpating them! So necessary an instrument is opium in the hands of a skillful man, that medicine would be a cripple without it; and whoever understands it well will do more with it alone than he could well hope to do with any other single medicine. To know it only as a means of procuring sleep, or of allaying pain, or of checking diarrhea, is to know it only by halves.

Sydenham's achievements were his own, and his limitations were the result of the conditions of his time. For he had his limitations, and justice requires that they should receive a word also. Though an intimate friendship bound him closely to two of the best minds of his age, Locke and Boyle, he was not qualified to emulate their breadth of mind and their large scope of thought.

In 1663, quinine was introduced into general use in

England under the name of Jesuits' bark or cinchona. Sydenham used it and praised it, and seems to have been among the first to recognize its value in intermittent fever. In a letter to Dr. Brady, dated February 7, 1679, he says:

Intermittent Fever was seldom or never cured by any remedy before it. Hence Agues were called the *Opprobria Medicorum*. A short time back, however, it went out of use. For when given a few hours before a fit, as was the usual practice, it would sometimes kill the patient at once. This happened to an alderman of London named Underwood and also to a Captain Potter. Now this terrible effect of the powder, although rare, frightened the more prudent physicians. Now for many years I have been reflecting on the remarkable powers of this bark, considering that with care and diligence it was really the great remedy for intermittents.

It sometimes happens [he says elsewhere], when the ague is irregular and has not taken the true form of typhus, that the patient is so continuously sick that he cannot keep the bark down at all.

From this typhus fever seems to have been considered the culmination of intermittent fever. So diabetes was thought to result from improper bleeding or purging in intermittent fever. In a word we must confess that Sydenham's theory of disease was as bad as his practice was good. To tell the truth, cinchona fell among thieves, and was early discredited by its association with quacks, who advertised it for personal fame and who exploited it for selfish profit. Not until years had passed away did cinchona recover from the contamination of its early associations.

Sydenham set little store by the discovery of Harvey. Not that he actively disparaged it, for he never men-

tions the name of his great contemporary, but he evidently thought that the practice of medicine, so far as it had to do with the conquest of disease, was very little indebted to the anatomists and physiologists, who dealt purely with the structural and theoretical departments of medical research.

The microscope also he ignored, even neglecting to inform himself of what it had already revealed. In 1661, as we have seen, Malpighi observed the capillaries in a frog's mesentery, and this confirmation of Harvey's discovery was one of universal interest; yet more than twenty years afterward, and in spite of the fact that Malpighi came to London and lectured before the College of Physicians on his observations with the microscope, Sydenham wrote: "We may know the larger organs of the body, but its minute structure will always be hidden from us. No microscope will ever show us the minute passages by which the chyle leaves the intestine, or those by which the blood passes from the arteries to the veins." The truth seems to be that Sydenham, in following the reaction against tradition, went too far, and disregarded as without value all the observations and discoveries of his contemporaries which did not promise an effective result in the conquest of disease.

Yet, while recognizing his limitations, we are far from feeling that any blame is to be imputed to him for them. Perhaps a wider horizon might have impaired the value of his actual vision, and have destroyed the great lesson of his life. That lesson is the lesson of practical work and not the lesson of science alone. Sydenham possessed a genius for the practice of medicine. His mind was exactly calculated for the work he had to do, and his courage compels our admiration.

His fame is secure. Haller exalted his name above

all of his contemporaries and called his period "the Age of Sydenham." It was thus made to constitute an epoch. In this estimate we must concur—to this award we must contribute. And it is a singular honor to bestow on him, when we consider the eminent men who conspired to render his century so illustrious, that he should be selected as representing the best attainment of professional excellence of his time.

IX

THE PICARO IN FICTION

THERE is an adage—how ancient I do not know, but it is perhaps more honored in the breach than the observance—that a man at forty is either a physician or a fool. The form of the proposition seems fortunately to imply that it is not possible or at least not usual for him to be both. It is certainly a reassuring reflection, to one who is already a physician, that his alternative is thus settled for him in advance. Still, while he thus evades the imputation of permanent folly, there is doubtless something of temerity in his venturing to discuss the intimate relations of any profession except his own. Such a venture is, however, rendered necessary in the consideration of the purely academical question, What constitutes the *gusto picaresco* in fiction?

Before one has reached the age of forty, he has been twice or thrice at least summoned into the chamber of medicine, and has been compelled to submit the ledger of his life to careful inspection. But the law, which is only custom speaking in a louder voice and strengthened by the endorsement of general sanction, surrounds us always, and, from the earliest years of accountability, restricts our activities in every visible direction. This it does in the interest of what it calls Society. But the picaro has no regard for Society. If he is not its

avowed enemy, he at least does not consider it a friend. There is a moral defect in him, not the defect of perversion, but of inactivity. The afferent fibers—those of perception—work imperfectly; the efferent fibers—of volition—do not work at all. Thus the moral nature is rudimentary, and he falls naturally into a total disregard of what Fielding calls “those ridiculous distinctions of *meum* and *tuum*, which would cause endless disputes, did not the law happily decide them by converting both into *suum*.”

The picaro thus exemplifies the primitive obliquity of non-development. But while the picaro stood still, the law advanced; while his growth was arrested, that of the law had become wonderfully developed along its own lines. In both, however, the issue lies in the intention. That it is so with the picaro we shall establish; but while the law has developed, it also has developed obliquely. It deals only with infractions of itself. It punishes crime but it offers no incentive to virtue. It does not regard honesty but dishonesty, and dishonesty is considered not in relation to intention, but to fact. Evils that exist only in meditation are not legal evils. Hatred, malice, envy, and revenge are not regarded by the law as evils until they ripen into slander, theft, and murder, and even then it is not the intention but the act that is judged. Premeditation is indeed considered, but only in a subordinate and corroborative way. It may enhance the offense, it never constitutes it.

The law may perhaps be regarded roughly as the development of the necessity to prevent, limit, or punish trespass, the term being used broadly to cover all encroachments upon the so-called rights of another, whether these rights be personal or proprietary. I

say it may be roughly so regarded, and that was the view of it that the picaro took, and he resented its interference in such matters. He disregarded these rights as being artificial and factitious and—for him—non-existent, except in so far as an open violation of them was liable to be detected and punished.

With a keen eye and a shrewd wit the picaro measured the law as one measures his adversary on the dueling ground. He weighed it in his own mind and had no further respect for it. When he himself happened to become the victim of some other picaro, he disdained to place his cause in the clumsy hands of the law, for besides being clumsy they were sticky, and no restitution was to be expected from such an assistant. He took his revenge into his own hands, and pursued it with a boldness, a patience, and a breadth of design that had nothing in common with the tardy and dubious processes of the law. To this also the law objected, since it had adopted for its own motto “Vengeance is mine.” To be sure, it neglected to add, “I will repay.” So what the law endeavored to enforce by violence, he sought to evade by cunning, but he was willing to allow fair play. He sets his wits against the machinery of the law, and the match was by no means as unequal as it would seem. He had, however, a very decided fear of the law. If he at times refrained from wrong-doing, it was not because it was wrong, nor because it was illegal, but because the results were apt to disagree with him. If he looked upon the world as his oyster, he was yet careful not to open it too publicly, for fear of unpleasant physical consequences. But his conscience remained untouched and a moral sense was denied him. The type is scarcely to be found in France, for the French have too universal a respect for

the law, and yet Scapin is a true picaro. It is even more rare in England, for an Englishman never forgets that he is a moral being, and yet Autolycus exhibits every trait of the picaro. In France the character becomes erotic; in England, tragic, or at least criminal. In both the delicacy is lost, the flavor spoiled, the water muddied. And so much for his legal standing.

The picaro was first launched into literature by the author of *Lazarillo de Tormes* in 1553, the year of Rabelais' death and of Spenser's birth. It has been ascribed to Don Diego Hurtado de Mendoza, the friend of Boscan and of the elder Garcilaso de la Vega. Hurtado de Mendoza served Charles V. as Ambassador to England, to Venice, and to Rome. He represented him at the Council of Trent and was for some years his viceroy in Italy. He died in Valladolid in 1575. His title in the *Lazarillo* has been attacked but not avoided.

Lazaro was born in a mill on the banks of the Tormes, whence his name. His father, a fugitive from justice, having entered into the service of a Moor as muleteer, was killed in the raid which the Christians made on Gelves. His mother, thus left destitute, found an easier way to live than by work, and gave him over, a lad of ten, to a blind beggar, who promised to look upon the child rather as a son than as a servant. Lazaro was quickly introduced to life.

We left Salamanca, and came to the bridge where there is a stone figure, something in the form of a bull. "Lazaro," said the beggar, "lay your ear to the bull and you will hear a great noise inside." I did so, and when he knew that my head was close to the stone he reached forth his hand and dashed my head against the bull so that for three days

afterward I was not free from the pain of it. "There, you fool," said he, "learn at once that the boy who leads me must know a little more than the devil himself," and he burst out alaughing. I seemed in a moment to awaken from the foolishness of a sleepy childhood, and said to myself: "It is true. I must open my eyes, and keep awake, for I see I am alone in the world, and must look out for my own advantage."

We began our journey and in a few days he taught me my new duties. As he saw me well disposed to learn them, he was much pleased and said: "I have no gold or silver to give you, but I will show you many ways to get a living." And so it was, for if God gave me life, my master gave me the means to live, and though blind, he opened my eyes. Since God created the world, he made no one more cunning or shrewd. In his art he was as keen as an eagle. Over a hundred prayers he knew by heart, which he recited in a low voice, but so penetrating that the whole church resounded. His expression was meek and devout, his face composed, and his attitude tranquil. He knew prayers for a multitude of different occasions: for women who desired children, prayers which would ensure success; for women unhappily married, prayers which would restore their husbands' love. In medicine, he knew far better than Galen what would cure toothache, fainting spells, and hysteria. For every ill he had a remedy. "Take so and so," he would say, or, "Do this and that," or "Gather such an herb." Thus he had the whole world at his heels, and above all, the women, who believed whatever he said and from whom he made such advantage that in a week he got more than any other beggar would get in ten years. Still, for all he got, he was so stingy that he kept me on the verge of starvation, and even denied himself the food that he needed. For my own part, my dinner consisted of two bites of stale bread, and if I had not resorted to many shrewd tricks, I would have surely died of hunger.

He carried all his gleanings in a cloth bag fastened by an

iron ring with padlock and key, and so careful and alert was he when he opened the bag that no thief in the world, however dextrous, could steal a crumb. When, however, he had closed it and locked it, he was less careful. Then it was that I fooled him, having made a little hole in the side of the bag, which I could open and sew up again easily, for I bled the bag well through this opening, taking out great pieces of bread and bacon and sausages, and filling up the hole in my stomach through that in the bag.

The usual currency of charity being farthings (*blancas*), Lazaro kept some half-farthings in his cheek, and substituted them for the farthings which he received for his master. The blind man knew the difference in his alms, but he bewailed the degeneracy of charity, and did not for a while suspect the trickery of the boy.

The old man liked his wine, but kept it for himself. He ate with the jug between his knees for precaution. Still, he needed one hand to guard his bag and the other to feed himself, and he had only two. The jug was thus open to attack. Lazaro took his advantage of the circumstance and helped himself between whiles, to a couple of quiet kisses.

But this did not last long, for the blind man perceived that his wine was being lessened, and while he kept the bag closed between his fingers, he slipped his thumb through the handle of the jug. So I found some long barley straws and kept them about me, and putting one in the jug, I would suck up deep draughts of the wine to my great delight. But he was so suspicious that, though he said not a word, he must have known what I was about, for he took his thumb out of the handle of the jug and always afterward kept it stuck in the mouth for a plug, and thus he felt safe. Now I had come to have a great liking for the wine, and I made a

little hole in the side of the jug and stopped it up with wax, and when we sat eating, I took away the wax and lying on my back, let the little stream of wine run into my mouth, in such a way that I did not lose a drop. After filling myself, I put back the plug of wax and stopped the flow. Still, he perceived the lack of the wine and fell to cursing the bottle, the wine, and myself. "You cannot say, uncle, that I drank it," I replied, "for you held it tight all the while." So he felt the jug all over and found the wax and understood the whole deceit, but he said never another word. The next day, the jug having been refilled, I again lay on the ground flat on my back, and picking off the piece of wax, with my face to the sky and my eyes half closed, I drank down the delightful wine in deep draughts. Then it was that the old man showed that he fully comprehended all my tricks, for suddenly seizing the jug with both hands, he raised it over his head and brought it down with full force upon my face. To me it seemed that the sky had fallen on me. I lay unconscious, stunned with the blow, with a bruised and bleeding face, and when I came to my senses, I spat out blood and teeth and wine and pieces of the jug, which was broken with the force of the blow, and had cut my face into strips.

Thereafter I hated him with my whole heart, but put off my revenge until I could be sure at the same time of my safety. And he told the story to those he met, adding, "Who would believe that so small a child could be so great a rascal!" and ridiculed me. So, afterward, I led him through the filthiest roads, willing to tread in the mud myself for his sake, and over the sharpest rocks, while he filled me with holes where he pinched me and wore out all my hair with cuffing me on the head. For though I swore to him that I led him through the best roads there were, he never for a moment believed me.

Let me tell you a single incident among many that happened, which will show how shrewd and cunning he was. When we left Salamanca, his purpose was to go to Toledo,

where he said the people were richer though less charitable, and he added, "More will the stingy give than the naked." It happened one day at Almoroz, where they were picking the grapes, that one of the grape gatherers gave him a bunch, for an alms. They were very ripe and ready to fall from the stem, so there could be no delay in eating them, and the bunch was a large one. So he sat down by the fence, saying to me, "I will show you how generous I can be. We will eat the grapes together, for there are enough for both. This is how we will do. I will pick a grape and do you pick one, promising me first that you will take only one at a time." So I promised, and we began to eat them in turn. But after taking a few singly, he began to pluck them two at a time. I said nothing, but since he had himself broken the agreement, I followed his example, and even bettered it, for I picked them off three at a time and ate them. Soon they were all gone, and the old man held up the stem and shook his head, saying "Lazaro, you have cheated me." "I have not," said I stoutly. "Yes," said he, "you promised me to eat them one at a time, and you have eaten them three at a time." "I did not," I replied, adding, "what makes you think so?" "Because," said the old sinner, "you saw me take two at a time and found no fault."

I shall not tell the story of how Lazaro ate the sausage at Escalona, because it is n't a nice story and, besides, the whole book has been often enough translated into English since the first translation appeared in 1568, to relieve me of the necessity. The old man missed the sausage, and sniffed about until he found out where it had gone. However, I said I would not tell it, so I pass it by, and others as well, to come to the final leave-taking between these two picaros.

After all this abuse and suffering that I had endured from him, I made up my mind to leave him, but I wanted

him to remember me. One morning we went out into the town to ask for alms. It had rained all the night and was still raining hard. Few were out of doors, and we got little in the bag. The night was coming and we drew together under a porch and waited, but the rain continued. Finally he said: "Lazaro, the rain is falling more instead of less. Let us go to the inn." To reach the inn we had to cross a little stream. "Wait, uncle," said I, "until I find a place where you can get across easily, for the water is wide. I will find a narrow place where you can jump over without wetting your feet." "That's a good boy," he answered, and did as I told him. I led him to the middle of the street and stood him on the edge of the stream over against a post. "Here you are, uncle," said I. "Do you jump first," he replied. So I jumped to one side and ran quietly to the other edge of the stream. "Jump, uncle," I cried. "It is all right, only jump as far as you can." Hardly had I uttered the words when the old man balanced himself like a goat on the edge of the stream, and jumped, striking his head with full force against the post, and rolling off stunned into the water. "How is it," I cried, "that you could smell the sausage and not the post?" Some people passing through the plaza ran to his assistance, and I took to my heels, out of the town gate and down the road, without knowing or caring to learn what became of him.

Of Lazaro's seven masters, we may easily neglect the priest, the friar, the seller of Bulls, the chaplain, and the constable, but the hidalgo is not to be dismissed with the mere mention.

Lazaro ran against him one morning in Toledo.

"Boy," he asked, "are you looking for a master?"

"Yes, sir."

"Then follow me. God has been kind to you to-day to

place you in my path. Some good prayer surely you prayed this morning. Follow me and give thanks to God."

It was about eight o'clock in the morning when I met my new master and he led me in his wake about the city. We went through the plaza where provisions were sold. I expected that he would buy what was needed for the house and have me carry it home, as householders are wont to do, but he swung by without a pause. "Perhaps he does not find here what he wants and will get it somewhere else," I thought.

But we kept on walking until it struck eleven, when he turned aside and entered a church, with me still at his tail. With great devotion he kneeled while mass was said and other divine offices, until all were done. We were the last to leave the church. He resumed his former rapid gait and we went down a side street. Then was my heart glad, for I thought, "My master is not one who is obliged to buy his own provisions. Servants he has, to be sure, and the table is already spread—such a table as I desire and am in need of." One o'clock now struck, and we stopped before a house, and my master drew a key from his sleeve and opened the door and we went in. The place was so gloomy that my heart sank, but the patio, though small, was clean, and the rooms seemed decent. Once within, he removed his cape, and having assured himself that my hands were clean, we shook it and folded it very carefully. He then dusted one of the stone benches that stood about the wall, and laid it down gently. He then sat down on the bench and questioned me fully about myself. I answered him at greater length than seemed to me proper at such a time, when it would be better to lay the table and stir the pot for dinner. However, I lied as well as I could, and satisfied him as to my abilities. It was now two o'clock, and my master showed no more desire for food than if he were dead. I fell to thinking of the deserted house in which we sat,—the door closed all day, no sound of foot-

steps above or below, no thought of food, no busy kitchen,— I could not see even a table. It seemed like an enchanted or accursed house. Suddenly he asked me: "Boy, have you had your dinner?" "No sir," I replied, "it was not eight o'clock when I met your worship." "Well," he said, "though it was early, I had already breakfasted, and it is not my custom to eat again before night. So you may pass the afternoon as you like and afterward we will have supper."

At this I was ready to fall from my seat, not only from hunger but because I now knew what an enemy I had in fortune. I saw myself standing between a past that was filled with blows and abuse, and a future that threatened a speedy death from starvation. However, I concealed my despondency as well as I could and replied: "Thank God, I do not care much for eating. My former masters have often praised me for this." "I too," he said, "am pleased to hear you say so. None but pigs stuff themselves with food." I then drew aside and screening myself behind the door, took some chunks of bread out of my bosom and began to munch them. They were the result of my morning's begging. He saw me and called out: "Come here, boy! What are you eating?" I went to him and showed him the crusts of bread. There were three. He took the biggest piece, saying, "By my life! This seems good bread, where did you get it? was it kneaded with clean hands?" "I know nothing of that," I replied, "and in good faith I don't care much." "I hope to God it was," he said and fell to devouring it like a wolf. "What excellent bread!" he exclaimed, eating it as fast as he could. I made haste to swallow my two little pieces for fear he would seize one of them. After he had finished even the crumbs he went into another room and, bringing out a broken pitcher, took a long drink, and then offered it to me. "I drink no wine, sir," I said, "I am no tippler." "It is water," he responded, "you may drink it safely." So I took a little swallow, for it was not water that I craved.

The next day Lazaro's master went out early and was gone all day. Lazaro himself waited until the middle of the afternoon, hoping his master would bring some food home with him, but as the day waned and no master appeared, he went out into the city and passed up and down begging an alms for the love of God. Stale bread he got and a cow-heel, with which he returned and found his master walking up and down the patio. Lazaro expected to be beaten for not staying at home, but his master only asked him where he had been, saying that he himself had come home and, finding the boy away, he had eaten his supper alone. After a little, Lazaro brought out his bread and cow-heel, and began to eat in a corner, but his master watched him, and when he saw the scraps that the boy had taken out and spread on his knees, he drew near and said:

"Lazaro, though I have just eaten to satiety, it almost seems as if I myself had a desire for food when I see you eating so heartily. Truly company gives appetite, and no one should eat alone." "Sir," said I "this bread is famous and the cow-heel delicious." "Cow-heel is it?" he cried, "I prefer cowheel to venison and roast pheasant." "Try it then, sir," said I, and he fell to work with me and together we licked the bones and finished the bread crusts.

So they lived, Lazaro begging the food that kept them alive, and his master, who had always just dined, falling upon the beggar's scraps with the eagerness of a famished grey-hound. One day the master found a real in the street and came home with wings. "Take it, Lazaro," he cried, in his excitement, "take it and buy bread and meat and wine and we will have such a feast as the king would envy us." So Lazaro went out and started for the market. Two blocks from the

house he met a funeral procession, with the coffin and bearers in front and a few people in mourning following them. Among these last a woman cried and sobbed:

"Oh, my husband and my lord! Whither are they bearing you? To the sad and gloomy house? To the abode of sorrow and despair? To where they neither eat nor drink?"

As she uttered these words, heaven and earth came together, and I fell as if I had been struck dead. But suddenly rising, I started to run back the way I had come, and dashed through the door and into the patio where my master was walking. He turned pale and staggered when I burst in, for he thought I had lost the real. "Quick! Master!" I cried, "lock the door. They are bringing a dead man here. Hasten! Hurry!" "What is the matter?" he asked, still pale, "What do you mean?" "Close the door first," I cried, "and lock it. I was going to the market and I met a body being borne along the street for burial and a woman in mourning following the body, and she said they were bringing it here to be buried. I know it was this house she meant for she described it perfectly."

The master laughed and flushed and took no offense. The food was brought by Lazaro and they had a banquet, and the master for once filled himself to the rim and made no affectation about it, and if the King of Spain had taken his arm and called him cousin, he would have been offended. Lazaro, too, filled for once all the unaccustomed concavities of his body, until one would have thought that he was laying in provisions against the day of judgment.

Such was the earliest picaro of modern fiction. How far a recollection of the *Encolpius* of Petronius may have suggested the character, or the *Phormio* of Terence,

with the last of whom Hurtado de Mendoza must have been familiar, has been abundantly discussed by Spanish critics, in a very natural impulse to trace the descent of the picaro.

But while it is true that all of one's predecessors are not necessarily his parents, still it remains probable that in most cases it is among one's predecessors that his parents are to be discovered, if anywhere; and it is perhaps among the strolling students of Europe, that the true ancestor of the picaro in literature should be sought. These students wandered from inn to inn and from convent to convent throughout Christendom. They had, as a rule, been admitted to the minor and preliminary orders of the Church. They were readers, they were even exorcists, and their conventional education had made them familiar with the Latin tongue, then the common passport to the society of educated men. The mass of the common people, unaware that they were themselves engaged in the formation of a language that should become the vehicle wherein great works were destined to be transmitted to distant ages, looked with awe upon all who spoke in Latin. God might be able, since He was omniscient, to pick out a doubtful meaning from a prayer uttered in the vulgar tongue, but His own language was Latin and to a Latin prayer He was attentive. Did not His own priests always address Him, for that reason, in Latin? So while learning was little pursued, it was highly honored, and words that they did not comprehend were listened to by the common people with an admiration that was almost ecstatic. Happy the householder who was privileged to entertain them! Happy the tavern-keeper whose common room held, of an evening, two or more of these garrulous scholars! Though the

wine they drank and neglected to pay for was worth two sous the quart, yet the trade they attracted far more than made up the loss. Moreover, there was none of them all who would refuse to write on a scrap of paper, a Latin charm that would keep off mildew from the grapes, murrain from the cattle, and scald-head from the children.

Thus they fared over Europe, filled with wine, reveling in casual and indiscriminate amours, rattling the dice in the hay-mow, scribbling in barns and under the wayside hedges those Goliardic verses that we yet read with astonishment and delight. There is a charm in reading of this life, so free from reflection and responsibility, so careless, so sensual, so lighthearted. They were free even from the peril of the law, for they were under the control of the Church, whose benevolent judgments fell very gently upon these kindly sinners, some of whom became steadier as they grew older and attained to something more than a mere nominal connection with the Church. Some of their songs have been turned into English verse by Addington Symonds. One of them, *The Confession of Golias*, appears to have been written in Pavia about the year 1162. The Latin form is well known,

Mihi est propositum in taberna mori;
Vinum sit appositum morientis ori;
Ut dicant quum venerint Angelorum chori,
Deus sit propitius huic potatori.

This stanza and the following one I give in Mr. Symonds's translation:

In the public house to die
Is my resolution;
Let wine to my lips be nigh
At life's dissolution;

That will make the angels cry
With glad elocution:
"Grant this toper, God on high,
Grace and absolution."

With the cup the soul lights up,
Inspirations flicker;
Nectar lifts the soul on high
With its heavenly ichor:
To my lips a sounder taste
Hath the tavern's liquor
Than the wine a village clerk
Waters for the vicar.

Walter Mapes was a picaro—the *Song of Golias* has been ascribed to him—who became Archdeacon of Oxford, after having represented the King of England at the Council of the Lateran in 1179. Three hundred years afterward, Villon was a picaro, and a better poet than Walter Mapes, but he was spoiled by living under the shadow of the gibbet at Montfaucon.

Perhaps the ancestry of Lazarillo is to be sought among the Oriental picaros, who are a prominent feature in Eastern literature and are so ancient that they have been conjectured to represent some personages in the Lost Tales of Miletus. In Cardonne's collection of Eastern stories several picaros are to be found.

A peasant, mounted on his ass, led through Bagdad a goat with a bell about his neck. Three sharpers observed him pass and at once coveted his possessions. "I will guarantee," said the first, "to steal the goat." "And I will promise to take the ass," returned another. "But I will deprive him of all his clothing," added the third.

The first one followed the peasant carefully, and succeeded in dexterously detaching the bell from the neck of

the goat. Tying it then to the tail of the ass, he got away with his prize. The peasant, hearing the sound of the bell thought the goat was following him, until, after awhile, looking back, he saw that the goat was gone. At once he raised a great outcry, calling out that some one had stolen his goat. At this the second picaro appeared and said: "As I came up the street, I saw a man go down that alley dragging along a goat in a great hurry. You can catch him if you go at once. I will hold your ass for you." The peasant started at a run down the alley, but could get no trace of the thief. So he returned to find his ass gone too. The poor fellow raised his hands to heaven, tore his hair, and filled all Bagdad with lamentation. At the turn of the street, however, as he stumbled along, he saw a man lying down and peering into a deep well, while he moaned and cried aloud, with tears cursing his ill-luck. The peasant came up to him and said: "You should make less noise and not lament so bitterly. Your loss can be nothing to mine. I have lost my goat and my ass?" "What are a goat and an ass?" cried the other. "I have just dropped into this well a casket of jewels that I was carrying to the Caliph. He will have me hung for a thief." "Why not go down and get them?" asked the peasant. "Because I am afraid of the water. I might as well be hanged as drowned. But I will give ten gold pieces to any one who will recover them for me!" In a moment the peasant had stripped. "Promise me," he said, "the ten gold pieces and I will bring you your casket." So, receiving the promise, he descended into the well. He did not find the casket, but after returning to the surface, he discovered that the pretended loser of the casket had made off with his clothes, and he was left naked in the middle of the city of Bagdad. . . .

This is, of course, not a story. It is merely the synopsis of a story; but it will do excellently well to illustrate the Persian picaro.

As much ingenuity has been exercised to discover the parentage of Lazarillo as if he were a claimant to the Spanish throne, for in addition to these speculations as to his origin, the conjecture has been made that he was taken from the tales of Boccaccio. But Bruno and Buffalmacco were painters of very considerable merit, and only picaros for occasional sport. Vasari says: "When he wished to be diligent and take pains, which seldom happened, Buffalmacco was not inferior to any other artist of his time." There are some good stories of Buffalmacco in Vasari, one of which I must transcribe because it has such a perfect picaresco flavor.

He was engaged by an avaricious Florentine to paint a picture of St. Christopher. The price agreed on was eight florins. The Florentine, wishing to get all he could for his money, stipulated that the figure should be twelve cubits in length. When Buffalmacco went with his materials to the church, he found that the wall was not above nine cubits in height. However, as it was a little longer than it was high, he decided to paint St. Christopher lying down; but inasmuch as the wall was not quite long enough for a figure of twelve cubits, he was compelled to turn up the legs on the other wall. The result was ludicrous enough. The Florentine refused to pay for it, but the judge, before whom the case was tried, justified Buffalmacco by the terms of the agreement. The picture is not, I believe, now extant.

Boccaccio tells several stories of this Buffalmacco and the practical jokes that he, together with Bruno, played upon their common friend, Calandrino. Here is one.

Calandrino had a little farm, some distance from Florence, where once a year, in December, he went

with his wife to kill a pig. It happened one year that his wife was ill and that Calandrino went alone. Bruno and Buffalmacco, who seldom lost sight of him, that they might lose no occasion for a joke, knew that Calandrino's wife was ill and that he had gone without her to the farm; so they decided to follow him under the pretext of paying a visit to the curate of the place, a friend of theirs, with whom they had often had good sport formerly. When they reached the curate's house, they learned that Calandrino had killed his pig, so, accompanied by the priest, they walked to his farm. After the usual compliments, Calandrino said: "I am glad to show you that in addition to my profession as a painter, I am also a practitioner of domestic economy," and he led them into a little side room in his house, and pointed to the fine pig he had just killed. "I shall salt it," he said, "and have meat for the whole winter." "You would do better to sell it," suggested Bruno. "And why should I sell it?" "To have a good time in our company with the money it will bring." "And what would my wife say?" "You could tell her that some one stole it," said Bruno. "Ah, but I know her too well. She would not believe me, and God only knows the outcry she would raise. Moreover, I would be a fool to sacrifice to the pleasure of a few days, what would serve for a support to my family for months. You will therefore pardon me if I do not take your advice." Buffalmacco and the priest supported Bruno's opinion, but all their arguments went to pieces against the common sense of Calandrino. It was too great a sacrifice to ask of avarice, and the only thing they could get out of him was an invitation to supper. This, however, they refused to accept and went off grumbling.

As soon as they were in the street, Bruno turned to Buffalmacco and asked: "How would you like to steal his pig to-night?" "I would like nothing better, but how?" "Don't trouble about that. I have thought of a good way, provided he does not remove it to another place." "Why then hesitate," replied Buffalmacco, "we will eat it together and our friend the curate here, will help us. Better for us to eat it than leave it to that imbecile who, I'll bet my head, does not know even how to salt it." The curate willingly, for the sake of the joke, entered into the plot. "Now that we are all agreed," said Bruno, "let us fix upon our scheme at once. Calandrino is fond of wine, especially at another's expense. So let us go back to his house and take him with us to the tavern. The curate will say that it is at his invitation, and we will afterward make up to him our share. There is no doubt, if the wine costs him nothing, but he will drink until he is full. Then it will be an easy matter to steal his pig, and he cannot have any suspicion that we were concerned in it. Come on, then, and let us start it a-going."

As soon as Calandrino learned that the priest would pay for all, he went with his friends forthwith to the tavern. The wine seemed so good to him that, as Bruno had foreseen, he drank too much, and when at midnight they withdrew from the tavern, his legs would scarcely carry him. When he got home, he spent a long time in getting the key into the lock, and he finally stumbled into bed with his clothes on, leaving the door half open. About an hour afterward, Bruno and Buffalmacco came to the house and, finding the door open, they went in quietly while he was snoring aloud, and carrying off the pig, brought it between them to the house of the curate.

It was a good many hours after sunrise when Calandrino awoke. He got up and finding the door open, he hurried to the little room where his pig was hanging, but when he found the pig gone he was beside himself with grief. After a while he regained his senses, and started out running along the street, asking all his neighbors if they had seen his pig. Of course they knew nothing of it, and he fell to groaning and lamenting his hard luck with a shower of tears. In this condition Bruno and Buffalmacco found him. As soon as he saw them he burst out, "O, what a misfortune! They have stolen my pig." "Good!" said Bruno, in his ear, "Good! my friend. That's right. Make a great outcry, that they may believe you." "May the Devil take me if I lie," Calandrino shouted out, "they have stolen my pig I tell you." "Excellent! my dear friend, this is the way to persuade them." "You make me furious, thinking that I am playing a part. I hope I may be strangled and end in Hell if I lie. They have stolen the entire pig, I tell you." "But," replied Bruno, "how can that be? It was in the little room yesterday. Would you try to persuade us that it has perhaps flown away?" "It hasn't flown away, it has been stolen." "That's a likely story." "It is true. I am a ruined man. I shall never dare to go back to Florence. My wife will never believe me. God knows what a row there will be." "If what you say is true," replied Bruno, seriously, "here has been a knavish piece of work. But I can't bring myself to think that you are telling the truth." "What do I care what you think?" roared Calandrino. "The pig is gone. You are enough to make a man curse God and all the saints in paradise." "In that case," put in Buffalmacco, "we must try to find the thief." "That is the way to

talk," replied Calandrino, "but how shall we go to work?" "In one thing we must agree," said Buffalmacco, "and that is that the inhabitants of India did not come here to steal your pig. The thief is one of your neighbors. If you can once get them all together, I know a way, with a little bread and cheese, to discover the thief at once." "It won't work," exclaimed Bruno. "Not that I doubt your charm, but the thief will keep away." "What can we do then?" asked Buffalmacco. "What we had better do is to get some pills of ginger, and plenty of good white wine; then invite all the neighbors to come and drink a glass to Calandrino's health. After they have come, we can charm the pills and discover the thief." "Good!" exclaimed Buffalmacco. "What do you say, Calandrino?" "I shall be satisfied if I can get my pig back." "Then give me some money," said Bruno, "and I will go to Florence and buy what we need."

In Florence, Bruno went to an apothecary, an old friend of his, and bought a pound of ginger pills, of the size of a nutmeg. He also had the apothecary make up two other pills of the vilest tasting ingredients. These looked just like the ginger pills but were marked. He also bought a quantity of the best white wine, and with his purchases returned to his friends. "Tomorrow," he said to Calandrino, "is a feast day. Invite all your neighbors and I will promise to find the thief."

Early in the morning, the neighbors were all assembled, and Bruno and Buffalmacco came with a tray of pills and another of wine. Bruno addressed the gathering. "Gentlemen," he said, "our excellent friend, Calandrino, has invited you here to drink his health. But he has also another object in view which

I will now explain. Day before yesterday some one stole our excellent friend's pig, and he, wishing to learn which of you played him this scurvy trick, has summoned you here in order that each one of you shall chew one of these pills and swallow a draught of wine. There is no question but the thief is now somewhere among us who are assembled. All who are innocent will find the pill sweeter than honey and the wine delicious, but to the thief the pill will be so bitter and seem so offensive, that he will not be able to swallow it. I will pass round the pills and Buffalmacco will serve the wine, and I hope no one will refuse the test. They all submitted willingly, and Bruno distributed to each a pill, taking care to give Calandrino one of the two that were marked. Scarcely had Calandrino bit into his pill, when the intolerable offensiveness of it brought the tears to his eyes, and he was compelled, with every expression of disgust, to spit it out. Bruno was watching him secretly and now coming up to him said: "Doubtless there is some mistake here. You perhaps spat it out inadvertently. Take another," and with his own fingers he placed the second marked pill in Calandrino's mouth. Every eye was fixed upon the unfortunate man as Bruno gave him the second pill. He tried to swallow it but it was too big. He began to chew it hurriedly. It tasted worse if possible than the first. The tears rolled down his face, but shame kept him from spitting it out. He gulped down the greater part of it with a violent effort, but alas! his stomach refused obedience, and Calandrino was obliged to lie down on the ground, an object of pity, if the anger of his guests had left any room in their hearts for pity. They overwhelmed the poor fellow with violent reproaches, and went away, finally, filled with wrath

and resentment. The three friends were left alone. "Did you get a good price for it?" asked Bruno, bitterly. "I knew well you must have stolen it yourself, you rascal! What! would you try to impose on Buffalmacco and me, who are simple enough to place confidence in your lying words? And now nothing would satisfy you short of insulting all your neighbors here. Silly fool! They will pay you back sometime. Anyhow Buffalmacco and I are through with you. We have found you out. You cannot deceive us again. Never will you find us behind you when you get into any new trouble." "He must have a mistress here," said Buffalmacco, "and has given her the money he got for his pig. I think we ought to tell his wife of it." "We certainly will, unless the rascal gives us a pair of fat pullets apiece to keep our mouths shut." So Calandrino gave them the pullets, which they ate with their friend the curate, but the pork they salted down for the winter.

The influence of Italian literature was very strong in Spain in the sixteenth century. Hurtado de Mendoza, Boscan, and Garcilaso all fell under its influence, and Bruno and Buffalmacco, though only amateur picaros, may have given the author of *Lazarillo* an impetus which ended in the introduction of the professional picaro into general literature. Further than this, we cannot ascribe to Italy the origin of the Spanish type.

Lazarillo de Tormes was followed by a host of continuations and imitations, and was translated into all the European tongues. However, it was only in Spanish literature that the type flourished, for national characteristics prevented it from thriving elsewhere.

There may be a dispute concerning *Lazarillo's* ancestry, but there can be none whatever concerning his progeny. His children all favor him. In the *Vida del Buscon*, by Quevedo (1627), Pablos follows his young master Don Diego to a school kept by a teacher named Cabra. The schoolmaster is described at great length and with an exaggerated minuteness of detail that becomes, like all purely verbal wit, at length wearisome.

He had a small head and red hair, and a long thin body; his neck was as long as that of an ostrich and his larynx stuck out as if it were about, from necessity, to sally forth in quest of food; his arms were thin and his hands looked like a bunch of vine-tendrils. His legs were like a pair of compasses or a long two-tined fork. His house was the abode of famine. *There were even no spider's webs in it.*

After suffering for some time from starvation, the condition of the lads was discovered by the father of Don Diego, and they were carried home and put to bed. A physician was summoned who gave strict orders that for nine days no loud word should be spoken in the house, *because their stomachs were so hollow that sounds reverberated in them.* All this is fantastic; it is a burlesque of comedy. When once a false note is struck, disgust results. Pablos afterwards followed his young master to school at Alcalá. Here he got himself into countless scrapes, and executed innumerable rogueries. He made a wager that he would disarm the town watch and bring all their swords with him to the inn at the same time. The wager made, he went up the street until he saw the round coming with the Corregidor at their head. Then, breaking suddenly into a run, he dashed up to the watch and fell on his knees. "Help! Save me!" he cried

in an extremity of terror. The watch clustered about to learn the cause of his alarm. He turned to the Corregidor: "Señor, in your worship's hands is my only hope of succor and vengeance. The city is in peril. Grant me two words alone. I have to disclose a great crime." The Corregidor commanded the watch to withdraw a little, and Pablos said: "I have come from Seville on the track of six men, the wickedest men in all the world, thieves and murderers, who have killed my mother and my brother after robbing them. In their company is a French spy. They must be taken at once." "Where are they?" asked the Corregidor, eagerly. "Sir, they are at the public house in the Calle del Rei. But you must use caution. They are ready to flee." So Pablos led the Corregidor to the inn with his men, and there persuaded him that to enter the public room with their swords would alarm the murderers, and it would be better to lay them aside and rely on their pistols and daggers. So they hid their swords in the grass and went into the public house. Pablos gathered up the swords and took them to the inn where his friends were waiting.

Of course the Corregidor learned that he had been made the victim of a hoax, and when they came out, their swords were gone. But a Corregidor is not to be fooled with impunity. He at once ordered every house to be searched throughout that part of the city. Every watchman could recognize the boy. But when they came to Pablos's room, he lay in bed with a candle in one hand and a crucifix in the other, and at his side a priest saying in a loud voice the prayers for the dying. The Corregidor himself looked in and saw only a dying penitent; so he took off his hat, mumbled an Amen, and walked away on tiptoe, little guessing that the only

person in the city whom he thought unable to engage in such an escapade was the lad who had played the joke on him and on the whole town watch.

Pablos's uncle lived in Segovia, where he was well known to be a strict follower of justice. He was the hangman, and "to see him at work would make one yearn to be hung" (*Versele hacer, daba gana de dejarse ahorcar*). When Pablos's father died, his uncle wrote him to come to Segovia and be his apprentice and successor. He added: "You will do well to come, for with your knowledge of Latin and Rhetoric you will be a wonder as a hangman." The invitation came at an opportune time to rescue Pablos from inevitable disgrace and punishment.

Guzman de Alfarache appeared in 1599. It was written by Mateo Aleman and is the most extensive and complete of all the picaresco novels. The style of the *Buscon* is condensed and figurative like all of Quevedo's work; that of the *Guzman* is simple and diffuse. Even in Spain, the *Guzman* was more popular than the *Buscon*. It has, however, no continuity of purpose, no proper sequence of narrative, consisting of a series of disconnected incidents, which befall the hero without premeditation and which leave him without improvement. In fact, picaros seem to learn nothing from misfortune and failure,—that great school of wisdom. It is true that these incidents are strung along loosely on the thread of Guzman's life, but there are many which have not even this connection, being prolix narratives of other people, such as even Cervantes has introduced in *Don Quixote* and even more freely in *Persiles y Sigismunda*; and Lesage in *Gil Blas*. One of these stories which obstruct the current of the narrative in the *Guzman*, takes up nearly a half of the first

book, and is not even original, for I remember that when, some years since, I first read the *Guzman*, I recognized this story, of Ozmin and Daraja, as one that I had already read elsewhere, although I cannot now remember where. Still, it would be an ungracious task to pick out the few faults in the *Guzman*, and neglect to record the fact that its first success was well merited and that it is to-day the richest and most admirable of all the books of its class that were written in Spain. Only the *Gil Blas* surpasses it in interest, and not even the *Gil Blas* exceeds it in value. Few books more entertaining have ever been written.

In 1605, appears *La Picara Justina*, which, though written by a Dominican friar who had published several works of Christian devotion, is composed in a style of affected pedantry and borrows most of its incidents from the *Guzman de Alfarache*. Moreover, while the morality of the true picaro is neutral, that of the *Justina* is plainly too free. Its author has been accused of corrupting not only Spanish morals but the Castilian tongue itself. Of *Alonzo Mozo de Muchos Amos*, *Teresa de Manzanares*, *Bachiller Trapaza*, *La Garduña de Sevilla*, and others, I will only say that they established the picaro firmly in his place in literature, and may still be read with much pleasure and some instruction. In 1618, appeared *Marcos de Obregon*, of which I shall have something to say when speaking of the origin of *Gil Blas*.

Among the earlier picaros, however, should be mentioned Don Augustin de Rójas, on account of the very high place that he occupies in Spanish fiction. Having killed a man in a sudden street brawl, Rójas found refuge in the Church of San Juan. In the sixteenth century, the Church had not lost the blessed

power of protecting from violence the fugitives who sought shelter in the sacred edifice. Their innocence or guilt, she with a noble charity forbore to examine. A church was a city of refuge for any one who sought a temporary asylum within its precincts. So, while the officers of the law pursued Rójas closely, they dared not follow him beyond the entrance. For two days they waited for him to come forth, and then they took their departure. Having seen them disappear, Rójas came out, sword in hand, and desperate with hunger. In front of the church lived a young lady, whose parents had recently died, leaving her alone. She saw Rójas leave the church and knew his danger. She called him and opened her door for him to enter. There he lay hidden for a week, until arrangements had been made for a compromise. It cost the lady three hundred ducats, her whole fortune, to procure his release from justice. They continued to live together, Rójas begging alms in the street for their food, or writing sermons for a friar in the monastery of San Augustin, who paid for each sermon with a shank of beef and a loaf of bread. Then he played minor parts in the comedies of Guillen de Castro and of Lope de Vega, and became intimate with the authors themselves. He was also a friend of Cervantes. Afterward, he went the round of the provinces with a traveling band of players; he kept a store in Granada; he cast up the accounts of a provincial paymaster; he floated over Spain like a true picaro; he served in the army of the King of Italy, and in 1602, being then twenty-five years of age, he wrote the famous narrative of his life in his *Viaje Entretenido*, which is a drama, a collection of poems, an autobiography, and a picaro narrative, all in one.

The story upon which the induction to *The Taming*

of the Shrew is founded, is told in the *Viaje Entretenido*, but Shakspere is not indebted to Rójas for Christopher Sly. *The Taming of the Shrew* was put on the stage in 1596, and the *Viaje Entretenido* did not appear until 1602. They were both under obligation to Ludovicus Vives, who narrates it of the Duke Philip the Good of Burgundy. Burton has the story too, and tells us whence it originated. Burton wrote his *Anatomy* about 1625, but the story must have been long known in England and in Spain as well. Duke Philip died in 1467.

Several of Cervantes's shorter novels are stories of picaros. Among these is *La Ilustre Fregona*. A *fregona* was a maid who helped the cook. She scoured the pans and washed the pots. Peg of Limavaddy was a *fregona*. In Burgos there lived two gentlemen of birth and estate named Don Diego de Carriazo and Don Juan de Avendaño, whose two sons were nearly of the same age and fast friends. When the young Diego de Carriazo was thirteen years old, he ran away from home and lived among the picaros of Andalusia for three years. So contented was he with his wandering life, that he preferred cornstalks to the paternal mattresses and straw to clean sheets. Every trick was familiar to him; he knew and practiced every picaresque device and game, either with cards or with dice. Every season was spring, every step was freedom and delight. His appetite was always good, his sleep always sound, he went when he liked, he did what he pleased, he reveled in continuous freedom. When, after three years of this life, he returned to his home in Burgos, he found the ordinary pleasures of a life of respectability insufferably tasteless, and he longed for the delights of his recent years.

His friend Tomas de Avendaño also, incited by his glowing raptures, fell into a great desire to become a picaro. So together they left Burgos as if to go to the University of Salamanca. Money they had in abundance, enough to support them for a year at their studies. At Valladolid they got rid of the attendants who accompanied them from home, and wrote a letter to their parents saying that instead of going to the university, they had decided to go to the wars, and were about to set out for Flanders. Having thus closed the door to pursuit, they attired themselves in clothing suitable to their new intentions, and came to Toledo, where Tomas fell in love with the *fregona* at the inn where they stopped. Diego bought a mule and began life as a water-carrier. Thus their expedition came to a pause in Toledo, for after a few weeks, fortune led their fathers to the inn where they were serving under assumed names, and their *vida picaresca* came to a sudden termination. The kitchen-maid turned out to be a sister of Diego, and Tomas's love was rewarded by her hand in marriage, while Diego was united to the Corregidor's daughter. The escapade terminated happily and to the satisfaction of all the actors. There is one picaresque story in the novel, where Diego buys the mule to carry the water which he sold in the city. I will condense it from Cervantes's narrative.

Diego, having paid sixteen ducats for a fine mule, lounged about the plaza where the water-carriers were sitting on the ground in groups, talking, throwing dice, or playing cards. One group was just breaking up, two of the gamblers having lost all the money they had. The two who remained looked around for others to fill up the game, and one of them called the muleteer from whom Diego had just made his purchase.

"Come," said the gambler, "you have sold your mule and have plenty of money. Come and join us. We want it."

"I will," he replied, "if you can get a fourth. Three cannot play *primero*."

"I'll sit down for the fourth," said Diego, and the game was made up.

Almost from the start Diego continued to lose. After a little he said:

"I'll have to stop. I am cleaned out."

"No," said one of them, "you've got a mule."

So Diego staked the mule, in quarters, and in a few minutes the mule was gone back to his old master.

"Now you'll have to stop," said one of the gamblers.

"No," replied Diego, to the others' surprise.

"You've got some more money?"

"No."

"What then."

"I still have the tail of the mule."

"Ho! Ho! the tail of the mule!" cried the muleteer, thinking he saw a joke. "I'll have to inform you, Sir, that the tail goes with the mule."

But Diego was not joking at all. Curling up his legs under him in readiness to spring to his feet, he felt at the same time for his dagger.

"Tell me, then, if you please," he said very politely, "which of the quarters the tail goes with."

"I sold you the tail with the mule," returned the muleteer, beginning to suspect from Diego's manner that he was in earnest.

"If you had won the mule all at once, as I bought him, you'd have had the tail too. But we played for him in four parts and the tail remains. It belongs to me. Either you'll play for the tail against one part of

the mule as before, or I'll cut it off and keep it as a souvenir," and he jumped to his feet and drew his dagger. "If you want a whole mule, you'll play for the tail. Otherwise I'll cut off the tail and carve you into thin slices as well."

Picaros as they were, they were daunted by the ferocity with which Diego uttered the last threat. Moreover, they weren't sure whether he might not be in the right about the tail, so the three agreed that Diego had one more stake, and the tail was accepted as equal to a fourth of the mule.

So Diego sat down again, determined, if he lost the tail, to go away peaceably. But instead of losing, he won and won again until he had recovered his undivided mule. He continued to win until he had got back what money he had when he sat down. After a few minutes more, the sixteen ducats that he had paid for the mule were in his pocket, and, finding himself still winning, he pressed his fortune and pushed the muleteer and one of the carriers to the wall, and the game came to an end.

The poor muleteer, left without a farthing, gave vent to his despair. He threw himself prostrate upon the earth, and began to beat his head violently against the ground, raving and groaning like a man bereft of his wits. Diego went up to him and, laying his hand on his shoulder, told him to rise to his feet. He then counted out the sixteen ducats, and added to them what other money he had lost. The muleteer passed at once from the extreme of despair to an ecstasy of delight, and all praised the generosity of Diego. The story of the mule spread through the whole city, and the boys in throngs followed Diego wherever he went crying out, "*Daca la cola! Daca la cola!*" (Give

me the tail!) until he was compelled to stay in the house all day, and only under cover of night did he venture to go out. It was at this time that his father came with Señor Avendaño to the inn, looking for the long-lost daughter, and the story of *La Ilustre Fregona*, one of the very best of the *Novelas Ejemplares* comes to an end. I must not forget to say that this story contains references both to the *Lazarillo de Tormes* and to the *Guzman de Alfarache*.

In another of Cervantes's stories, *Rinconete y Cortadillo*, the two youths meet on the road and fall into conversation. Cortado does not attempt to disguise his calling, and Rincon asks him:

"Is your worship then, peradventure, a thief?" "Yes" the other replied, "in the service of God and all good people." "It is something new to me," said Rincon, "to learn that a thief can be in the service of God." "Sir," rejoined Cortado, "I have never dipped into theology, but although I am as yet only in the first year of my novitiate, it seems to me that it is never amiss to return thanks to God, whatever your employment. Moreover it is proved by the demand that our Association makes of all its members." "That demand must then be a good and holy one, since it enrolls thieves in the service of God." "We so regard it," replied Cortado. "We are by it obliged to lay aside a certain portion of our spoils, to purchase oil for a lamp that burns constantly in a holy shrine in this city, before a blessed image to whose existence we owe the success and safety with which we pursue our vocation. Moreover, on Friday we fast not only from meat but from theft, and we find that this pious habit brings us much benefit."

The statement has been made that the appearance of the picaro in fiction was followed by the assumption of the character in actual life. This is not a precise

statement of the fact. It would be nearer the truth to say, since picaros there have always been in the world, that the success of the character in fiction was the occasion for the exploits of actual picaros to be recorded. The most famous of these records is undoubtedly that of Doña Catalina de Erauso, whose history is best known to English readers through De Quincey's inaccurate but pleasing narrative, *The Spanish Nun*. In the *Revue de Deux Mondes* for March, 1894, there is a version in French of Doña Catalina's Memoirs, under the title *La Nonne Alferez*, translated by José Maria de Heredia, himself a native of Spanish America and a well-known member of the French Academy. In 1909, Doña Catalina de Erauso's Memoirs were translated by Mr. Fitzmaurice-Kelly into English, with the title *The Nun Ensign*. This fine work is thus accessible to all who are interested in the adventures of one of the most remarkable personages of modern times. Moreover, for scholarly workmanship, Mr. Fitzmaurice-Kelly's excellent book leaves nothing to be desired.

Clad in male attire, Doña Catalina, having escaped from a convent school, at the age of fourteen, made her way to Peru and Chile, where she served for some years in the wars against the Araucans. She—or he, for no human being had ever the faintest suspicion of her real sex—was absolutely fearless, a duelist, a gambler, a brawler. One single incident in her adventurous life I will take the liberty of copying from the work of Mr. Fitzmaurice-Kelly. It is but one of many, and is representative of the exploits that carried her fame through the world.

I went back to Cuzco again, staying at the house of the treasurer, Lope de Alcedo, and there I remained a while. One

day I went into a friend's house to gamble; two of us who were friends sat down to play and the game went on. The new Cid took a place beside me, a dark hairy man, of great height and truculent appearance, nick-named "The Cid." I went on with the game and won a trick; he dipped his hand into my money, took some *reales de a ocho*, and went away. Soon afterward, he came back once more, took another dip, helped himself to a handful, and placed himself behind me. I got my dagger ready, continued playing, and he again dipped into my money. I felt he was going to do so, and nailed his hand to the table with my dagger. I jumped up and drew my rapier, the bystanders drew theirs; other friends of the Cid joined in, pressed me hard, and wounded me thrice. I reached the street, and this was a piece of luck, for otherwise they would have cut me into ribbons. The first man to follow me was the Cid. I made a thrust at him, but he was encased like a watch; others came up and pressed me close. Two Biscayans chanced to pass just then, and seeing me engaged singlehanded against five, took my part. The three of us got the worst of it, and backed down the whole length of the street till we came to an open space. As we drew near St. Francis's [church] the Cid stabbed me from behind with such force that he went clean through my left shoulder; another ran his rapier a span deep into my left side, and I dropped, bleeding in torrents.

At this both sides bolted. I staggered up in a death-agony, saw the Cid at the church-door, and made toward him; he met me, calling out, "You dog! Are you still alive?" He made a thrust at me, which I parried with my dagger, and I replied with one in the midriff that went right through him. He fell clamoring for a confessor and I fell too. . . . The Cid died on the spot. . . . I was put to bed and the surgeon did not venture to dress my wounds till I had made my confession, lest I should die first. That splendid fellow, Fray Luis Ferrer of Valencia, came and heard my confession; and seeing that I was dying, I re-

vealed my sex to him. He was astonished, absolved me, and strove to cheer and console me. The Holy Viaticum was brought and administered and after this I seemed to feel stronger.

She got well and was sent to Spain, and charmed the king with the narrative of her life. Then she journeyed to Rome, where the Pope heard her tale, gave her full absolution, and his permission to resume male attire whenever she wished. Her story was the delight of Spain. Her portrait was painted by Francisco Crescentio and a play of which she was the hero was written by Juan Perez de Montalvan. It was in December, 1624, when she was about thirty-two years old, that she reached Spain, precisely at the time when the picaro of fiction was in full flower, so that she almost seemed to represent a national ideal. And yet her narrative is rather one of adventure than of roguery, and could easily be paralleled, as to its reckless bravery in sudden peril, by that of many a cavalier during the sixteenth century,—by Pedro de Alvarado, by Fernan de Soto, by Gonzalo Pizarro, by that great conqueror, general, and adventurer, Cortez himself. It was her sex that lent romance to her life and distinction to her adventures.

Having thus traced the conjectural origin of the picaro and his development in Spain, we must consider the contributions to this branch of literature in England and France. The old German *Eulenspiegel* was of distant kin to the picaro. *Eulenspiegel* was in fact written before Hurtado de Mendoza's *Lazarillo*, having been printed in 1550; but beyond the spirit of roguery that pervades them both, there is little similarity between them. Vulgarity and malice do not enter into the Spanish picaro and with malice

the German rogue abounds. Bishop Percy opens the second book of his *Reliques* with an essay *On the Origin of the English Stage*, in which he narrates one of Eulenspiegel's rogueries.

Something of the picaro animates the adventures of Bussy-Rabutin, Casanova, and Restif de la Bretonne, but these were real and not fictitious persons and belong, therefore, to biography rather than to imaginative literature. Moreover, they represent the erotic perversion of the picaro and not the picaro himself. In French literature, laying aside for the moment the consideration of *Gil Blas*, the only true picaro is the Scapin of Molière. Otway translated for the English stage *Les Fourberies de Scapin* under the name of *The Cheats of Scapin*, in which the wit of the Frenchman is metamorphosed into English vulgarity. The most improbable scene of Molière's play, where Geronte is carried in a bag and thoroughly drubbed by Scapin, is enlarged, or diluted, by Otway, to three times its original bulk, while the very amusing confession by Scapin of the successive tricks that he had played upon his unsuspecting master is almost entirely omitted. The only resemblance between Otway and Molière lay in their wives.

I have said that the *Lazarillo de Tormes* was translated into English in 1568. Professor Chandler says that it was licensed in that year, printed in 1576, and that new issues, or editions, were published in 1586 and in 1596. In 1594, appeared *The Unfortunate Traveler*, or *The Life of Jack Wilton*, by Thomas Nash, which shows remotely and fitfully the influence of *Lazarillo*. In the variety of his adventures, Jack Wilton surpasses Lazaro and almost rivals Guzman de Alfarache, whose exploits had not yet been written; but the English

rogue lacks the careless improvidence, the happy temper, and the innocent naïveté of the Spaniard. Jack Wilton has not the true picaro's heart. The resemblance is entirely superficial; the humor is wanting in spontaneity, the wit lacks point, the gayety is forced, and Jack feels the frequent prick of the English conscience. One quality especially separates *The Unfortunate Traveler* from the picaro type—it is flat and wearisome.

A different reproach must be written across the title of the next claimant. The *Beggars' Opera* is full of interest in itself, but it becomes eminent from the circumstances attending its appearance. When it was written, men still of middle age remembered the suppression of Monmouth's rebellion and the "Bloody Assizes" of Jeffreys, when English law, having for the time divorced old barren Justice from her bed, enacted those scenes of iniquity, the reading of which to-day fills us with indignation and horror. The Habeas Corpus Act was still less than fifty years old. To us it seems almost incredible that there could ever have been a stable condition of English society without the law of Habeas Corpus, but it was enacted only in 1679. At the time the *Beggars' Opera* appeared, in 1728, theft was still punished with death, and the penalty of transportation for life was an act of clemency extended with a flourish to the convicted thief. Bulwer-Lytton says in his *Tomlinsoniana*, "in the laws of England there were somewhere about one hundred and fifty laws by which a poor man might be hanged, but not one by which he could obtain justice for nothing." Unfortunate women were still burned alive at the stake for the imaginary crime of witchcraft. It was not until the ninth year of George II., that this law was

repealed, after being in the full operation of its iniquity for nearly two hundred years.

There was never a time in recorded history when a greater severity of the law was attended with a more pernicious development of crime than the end of the seventeenth century and the beginning of the eighteenth. People of all classes flocked to an execution with eager delight, and the thief or the murderer, who exhibited the most indifference in meeting his disgraceful fate, became the idol of all lesser malefactors and the envy of the town. To such a depraved audience, the representation of Captain Macheath on the stage was a fitting tribute to the popular hero, and Jonathan Wild lived again to receive new plaudits under the name of Peachum. The *Beggars' Opera* was thus an occasional play, and became an incentive to crime, not to virtue, though no one could reasonably expect to emulate the great examples of iniquity there presented. Even the appearance of morality was evaded by withholding from punishment every member of the gang of ruffians whom Gay described. They are not even indirectly censured.

However, the question of its morality is not what at present concerns us but that of its origin. Jack Sheppard had been hanged at Tyburn on the 18th of November, 1724, and Jonathan Wild had suffered the same penalty on the 24th of May, 1725. Two more famous thieves the world never saw. Cacus was a mere apprentice in theft. All London turned out to see them die. Broadside followed broadside. They were the talk of the town for months, and their fame spread over England. In the lobbies of Parliament their exploits were narrated and heard with a shudder of pleasure.

Defoe was then sixty-five years old. His work was done. Fame and wealth and general admiration were his. Defoe took up his pen again to tell their story and wrote a life of each of them. Jack Sheppard's portrait was painted by Sir John Thornhill, and a play was brought out at Drury Lane founded on incidents of his life. He was then twenty-two years old. Nearly twenty years after their execution, a judge of one of the London courts, one Fielding, a name not unknown nor unadmired by successive generations, wrote a *Life of Jonathan Wild*, to gratify the popular desire which was not yet quenched; and as late as 1839 the author of the *Tower of London*, having celebrated the exploits of Dick Turpin in *Rookwood*, wrote a *Life of Jack Sheppard*, whose name, with that of Jonathan Wild, the famous fence, yet glows with a fiendish luster. We may thus estimate the terrible impression that they made upon their generation.

Well, soon after their execution, Dean Swift—we can easily enough imagine the Dean and Pope and Gay sitting together at a table in Button's Coffee House and talking about the great Mr. Jonathan Wild and the marvelous escape of the late Mr. Sheppard from Newgate. There may have been others present, of that magnificent coterie of celebrated wits, but these three at least were there discussing the topic of the day, and the Dean remarked with a sneer that among the many ways in which the heroic exploits of the two recently deceased masters in crime had been illustrated, the only one that had been neglected was the idyllic; and he suggested, in his grim manner, that Gay write a Newgate pastoral, adding that it would be "an odd pretty sort of a thing," and well suited to Gay's hand. Gay, like Goldsmith a little later, was himself some-

thing of a picaro, and the *Beggars' Opera* was the result. At first no one would touch it. Pope found fault with it and Swift shook his head. There was no one to stand sponsor, until finally Mr. Rich thought there might be something in it, and assumed the expenses of production. It was a success from the start. The notes to the *Dunciad* proclaim the number of times it was given on the stage in London and throughout England. In the words of a friend of the author, it made Gay rich and Rich gay.

The hero is Captain Macheath, a highway robber, who, although in the third act he is confronted with six wives at once, four of them having babies in their arms, is a monster of virtue compared with two of his fathers-in-law: Peachum, who like Jonathan Wild, carried on a double commerce between the thieves on the one hand and the government on the other, betraying them in turn to each other for money; and Locket, the Newgate warden, who would procure the escape of his prisoners from Newgate, as Father Macshane would set them free from Purgatory, and on much the same terms. Few things more sordid and disgusting were ever written than the *Beggars' Opera*. It has not the faintest glint of the genial shrewdness of the picaro. Dean Swift, who wrote the *Modest Proposal*, did right to shake his head at the *Beggars' Opera*.

I am well aware that what has filled me with disgust has drawn unstinted praise from better judges of merit than am I. Hazlitt, whose slightest whisper moves me with respect, whenever it is uttered in his own voice, says: "It is a masterpiece of wit and genius, not to say of morality. It is a vulgar error to call this a vulgar play. So far from it, that I do not scruple to say that it appears to me one of the most refined

productions in the language." He then proceeds to affirm that "the moral of the piece is to show the vulgarity of vice," but surely that lesson is very imperfectly inculcated by representing vulgarity fortunate and vice triumphant. Not thus is virtue acquired. Montaigne tells, out of Pausanius, "of an ancient player on the lyre, who used to make his scholars go to hear one that lived over against him and played very ill, that they might learn to hate his discords and false measures." So Daudet thought *Sapho* to be a school of virtue and a moral lesson to his son. Into this question I cannot now enter. The *Beggars' Opera* may be as moral as Hazlitt affirmed, but its very morality, which I must deny on the principle that the knowledge of wickedness does not lead to either wisdom or virtue, removes it from that division of literature which deals with the picaro. Anything else, as far as the present study goes, it may be and welcome. *That* it certainly is *not*.

In fact, it is not easy to find anything that *is*. The "Gaberlunzie Man" was perhaps a picaro, but King James did not develop the character far enough to assure the type. The hero of mere adventure, like Robinson Crusoe or Quentin Durward, is as far away on one side as the gloomy tragedy of Jack Cade or Fagin, the Jew, is on the other. There does not seem to be in England any middle ground of moral indifference between vice and virtue, whereon a picaro can maintain more than a momentary poise. He must immediately declare his intentions. He must be either a sheep or a goat,—there is no permanent rest between them. This was what ruined Goldsmith. He was a compromise.

On the other side of the Irish Channel, in the same

year when Gay's masterpiece was presented and when that fascinating gentleman, Captain Macheath, in top-boots and spurs, was charming the pit of the London theater, Oliver Goldsmith was taking the trouble to come into an ungrateful world. In Goldsmith's account with the world he gave far more than he received and far better. His life is known and the account can be easily reckoned—reckoned, but not adjusted. The balance can never be paid now. The world remains increasingly his debtor, and five generations have added to the balance due him. I should like to breathe a timid hope that perhaps this is not true,—that somewhere he may yet experience a sympathetic glow in receiving the accumulated gratitude of the multitude to whom he has given so much delight, so much innocent and pure pleasure.

Well, Goldsmith was a picaro and traveled over Europe like any other picaro, begging at times for soup at convent gates and often paying for his bed by playing Irish jigs on his flute. Him Dr. Johnson reclaimed to a partial and intermittent recognition of the mediocre benefits of respectability. Others helped. The noble friendship of Burke, the dignified esteem of Gibbon, the gentle affection of Sir Joshua Reynolds, were not lightly to be disregarded. They were not disregarded, but they were not sufficient; for his faults—if faults in him they were, and not the ineradicable fiber of his true nature—remained those of the picaro. His excess in wine, his volatile amours, his passion for gambling, his careless neglect of the conventions of obligation, his gentle kindliness, were still the characteristic features of the picaro. Goldsmith was a child of nature. I am not trying to criticize him, but to understand him. He must certainly have had a

generous and a beautiful soul, for at the news of his death, Forster tells us, "Reynolds was painting when the message came; he laid aside his pencil, which in times of great family distress he had not been known to do, left his painting-room, and did not re-enter it that day." The staircase at Brick Court was filled with mourners whom Goldsmith had relieved when they were destitute. Ah, well! Not many can expect such a tribute, and perhaps not all can merit it. Hazlitt says of him (and I am the more ready to quote Hazlitt now, having differed with him a little while ago):

One should have his own pen to describe him as he ought to be described—amiable, various, and bland, with careless inimitable grace touching on every kind of excellence—with manners unstudied, but a gentle heart performing miracles of skill from pure happiness of nature. Poor Goldsmith! How happy he has made others! How unhappy he was in himself!

Much has been said and written about the lost volumes of Greek and Latin authors. Tears have been shed for the lost portions of Livy, Tacitus, Varro, and countless others. But what of the books that were never written? Not alone Dr. Arnold bewails the fact that Silanus kept no record of the table-talk of Hannibal; and surely many besides Thackeray must have lamented Goldsmith's failure to publish the narrative of his wanderings over the continent of Europe. *There* would have been a novel to which even Gil Blas must have struck his flag, only—it was never written.

But Goldsmith was not an Englishman, nor was Charles Lever, who, having drawn in Micky Free the picture of a picaro in a secondary character, conceived

the purpose of making a picaro the principal hero in a novel, and under this impulse wrote *Con Cregan*. The enormous success of the novel proved that there yet remained in the middle of the nineteenth century, a very marked popular fondness for the type introduced into literature in the person of Lazarillo de Tormes. Lever himself was amazed at the success of *Con Cregan*. So was Mateo Aleman surprised at the great popularity of *Guzman de Alfarache*. It was not until Mateo Lujan de Saavedra had written a continuation of the *Guzman* that Aleman awoke to the insistence of the popular demand and wrote another second part himself. So Cervantes doubted of the success of *Don Quixote* until an unauthorized hand pointed out the desire for a second part. So the author of the *Lazarillo* left to alien hands the task of adding a sequel.

Con Cregan is an extravaganza of adventure, wherein the picaro suffers a sea change through successful ambition, and forfeits his claim to membership in the *Sociedad Picaresca*. Lever gives to his hero the subtitle, *The Irish Gil Blas*, but although Con's wandering fortune leads him through Ireland, Canada, New Orleans, Mexico, Spain, Africa, Italy, and France, it is certain that Gil Blas himself, who would have fallen upon the neck of The O'Gorman Mahon and wept tears of admiring sympathy, would have looked askant at the Conde de Cregano, with his wealth and his royal orders and his credentials as Ambassador from France to the Spanish Court.

Gil Blas is the culmination of the picaro. It is the full and complete picture, of which the *Lazarillo de Tormes* is the initial design. "Be mine," wrote Dr. Gray to a friend, "be mine to read eternal new romances of Marivaux and Cr  billon." The romances of Mari-

vaux and Cr  billon have ceased to be new, but they are almost long enough to be still considered eternal. Scott alluded to this predilection of Gray's for novels, when he said: "If there is anything like truth in Gray's opinion that to lie on a couch and read new novels was no bad idea of Paradise, how would that beatitude be enhanced could human genius afford us another Gil Blas?"

Gil Blas, as read by the Spaniards, doubtless owes much of its truly Spanish flavor to Father Isla, who translated it from the French. Father Isla was himself an author of esteem. His *History of the Famous Preacher, Fray Gerundio de Campazas*, was a famous work which is by no means yet forgotten. It is a satire on the method of preaching then prevalent in Spain.

Preaching one day on the mystery of the Trinity, Friar Gerund began his sermon by saying, "I deny that God exists a Unity in essence and a Trinity in person," and then stopped short and looked over the audience. His hearers stared at one another, amazed at this audacious blasphemy. At length, when the preacher thought that he had fairly caught them, he continued: "Thus says the Ebionite, the Marcionite, the Arian, the Manichean; but I prove it against them all from the Scriptures, the Councils, and the Fathers." In another sermon, on the Incarnation, he began by raising his hand aloft as if it held a glass, and crying out, "Your health, Gentlemen," and as the audience laughed aloud at these unexpected words, he went on: "This is no laughing matter, Sirs, for it was for your health and for mine and for the health of all men, that Christ descended from Heaven and became flesh. It is an article of faith that '*propter nos homines et nostram salutem descendit de c  lo et incarnatus est*,'" whereat they all re-

mained in delighted astonishment, and a murmur of applause ran round the church.

Friar Gerund is known to all the world. Another of Father Isla's works that is not so well known is his *Life of Cicero* in verse. The manuscript was found unfinished after his death. The projected scope of this work may be inferred from the fact that this initial part, which alone was written, fills sixteen cantos and comprises twelve thousand verses, being thus equal in extent to the combined length of the *Georgics* and the *Aeneid*, and yet it leaves Cicero an infant of eighteen months, asleep in his cradle.

Father Isla it was who translated *Gil Blas* into Spanish, and his work was so admirably done that the Spaniards would gladly have claimed it for the original and relegated Lesage to the rank of translator. Father Isla affirmed that the book was a translation from some lost Spanish work, plausibly insisting, first, that Lesage was a confirmed borrower; second, that nearly all his other work was taken from Spanish sources; and third, that no one but a Spaniard could possibly have written it. Voltaire, who hated Lesage, declared in *Le Siècle de Louis Quatorze*, that *Gil Blas* was taken entirely from the Spanish romance of *Marcos de Obregon*; but the two works are so absolutely dissimilar that the conclusion is unavoidable that Voltaire had never read *Marcos de Obregon*.

The question of the authorship of *Gil Blas*, though closed to argument, is still open to prejudice, because sentiment has entered so largely into it as to impair reason and to disable judgment. This discussion I shall not attempt to review in all of its vagaries. Ticknor, in his *History of Spanish Literature*, has considered it

in detail from Voltaire to Llorente, and since Ticknor's time the discussion has continued without abatement or hope of settlement. The charge that Voltaire makes, however, is so precise and has been quoted so largely, that a few minutes may well be spent in its examination.

Something we willingly concede. Some parallel passages, some borrowed stories there are. Two of them I will translate, since they are not long, because they will afford a precise estimate of Lesage's plagiarisms.

Marcos, while yet a growing lad, left home with his father's benison, a few pieces of money, and a sword that was heavier than himself. He set out for Cordoba and stopped at an inn called the "Foal" (*El Potro*). Dinner time being distant, he visited the great church and made some acquaintances. Afterward he returned to the inn and sat down to dinner, the day being a fast day (*dia de pescado*).

As I sat down, one of those fellows that live by their wits, and there are many excellent ones in Cordoba, came up to me and said: "Sir Soldier, your worship must not think that you can remain unknown in this city, since for many days the report of your coming has preceded you. Such fine wits there are in this city! They know all men of excellence throughout the province." I am a little vain and more than a little. I believed him and asked: "And you know me?" "By name and report for many days," and saying this, he sat down by me and said: "Your name is Marcos de Obregon, and you are a great Latin scholar, a poet, and a musician." My head was turned, and I invited him to dine with me. He did not need to be urged, but took a couple of eggs and several of the fish and ate them. I called for more and he said to the hostess: "Madame" (for he was not it seems staying at the inn), "you do not know whom you have in your house. Know, then,

that this is the most learned young man in all Andalusia." He continued to flatter me and I to feed him, and after a little he asked: "Does not your worship drink any wine?" "No, Sir," I replied. "You are wrong," he said, "for it is better for a young man, traveling and putting up at inns where the water is usually bad, to drink wine, which when mixed with the water, gives strength to the heart and color to the face, removes melancholy, lightens fatigue, gives courage to the coward, moderates the liver, and banishes the memory of care." So much he praised wine that I ordered a quart of the best, which he drank, for I did not dare. Then he fell to praising me again, and I listened with much delight. And I ordered more food, and he continued to eat and drink, inviting also some of his friends who came in, and speaking of me as another Alexander. "I cannot sufficiently satisfy my eyes with gazing upon you. I know a gentleman who would give two hundred ducats to see you in his house." I, puffed up with his flatteries, asked who the gentleman was. "We will go and see him," he replied; "I want him to meet your worship." So we went out and his friends followed us until we came to a big house where a blind man lived, and the rascal said: "This is where the gentleman lives who would give two hundred ducats to see your worship." Angry at his joke, I retorted, "And I would gladly give the like sum to see you swinging from a gibbet." So the fellow and his companions went off and I remained there very angry and half insulted, although he said truly that the blind man would gladly give all that he had to be able to see me.

It is an act of charity to steal such a child as that and dress it in decent clothes, and in *Marcos* there are many such wooden pleasantries. Espinel's style is called limpid by his countrymen; it is, in fact, so dilute that it must needs seem clear. Marivaux is epigram-

matic beside Espinel, whose awkward humor reminds one of the comic scenes thatadden Horace's narrative of his trip to Brundisium. The following is the version of Lesage.

Gil Blas, like Marcos, had left his father's house in Oviedo with the paternal blessing, an old mule, and forty ducats in his pocket, besides a few extra reals that he had stolen from his uncle. He reached Peñaflor, on the road to Salamanca, and there told his story freely to the keeper of the inn where he stopped. His first exploit was to sell his mule for a tenth of its value.

As soon as I returned to the inn, I asked for my dinner. It was Friday, and I contented myself with ordering some eggs. While they were getting ready, I engaged the inn-keeper's wife in conversation. She seemed to me a pretty woman with a frank open manner. When they announced that my dinner was ready, I sat down alone to the table. Scarcely had I eaten the first mouthful of my omelet, when the inn-keeper came in with a man whom I had spoken with on the road. This gentleman, who might be about thirty years of age, had a short sword at his side and came running to me with a smile on his face. "Señor Licentiate," he said, "I have just learned that your worship is Señor Gil Blas de Santillana, the honor of Oviedo, and the flower of philosophy. Is it possible that you can be that miracle of learning, that sublime genius, whose repute is so great in the whole country! You do not know," he continued, turning to the inn-keeper and his wife, "what a treasure you have in your house. This young man is the eighth wonder of the world." Then, turning to me, he threw his arms about my neck, saying, "You must pardon my emotion. I cannot control myself or contain the joy that the sight of you brings to my heart."

I could not reply at once, so tightly he held me in his arms. Indeed, I could scarcely breathe. After a little

I disengaged my head and said: "I did not know that my name was known in Peñaflor." "Known!" he exclaimed, "we have a list of all the great personages who are born twenty leagues around. Your worship is regarded as a prodigy who is destined to impart as much glory to Spain as the seven wise men bestowed on Greece." Another embrace followed these words, in which I was almost strangled. Little of the world as I had seen, I ought not to have allowed myself to be carried away with his emotions and his flatteries. I should have known that such adulation, such excessive and unmerited praises, could only come from one of those plausible rascals and smooth-tongued swindlers who abound in all towns, and who only seek to fill their belly at any traveler's cost; but my youth and vanity blinded my eyes, and my flatterer seemed to me a very excellent and honorable fellow. So I asked him to share my dinner. "With great pleasure," he at once replied, "and I am very grateful to my good fortune in bringing me acquainted with the illustrious Señor Gil Blas. Indeed," he continued, "I have already dined, but I will gladly sit with you at the table that I may share your company, at least, if not your dinner."

So he sat down on the other side of the table, and, scarcely waiting for them to bring him a plate, he fell upon the omelet as eagerly as if he had not tasted food for three days. I saw at once that no omelet could long withstand such a spirited assault, and ordered another, which was brought to the table just as my guest was finishing the first one. He fell upon this one also with the same avidity, and without losing a bite, he continued to pour forth his flatteries, which filled me with self-contentment. Between bites, too, he drank huge draughts of wine to my good health and to that of my father and mother, whom, as he said, even the Goddess of Fortune must envy in being the parents of such a son. At the same time he kept filling my glass also, and I responded as well as I could to repeated toasts, so that what with the wine and what with

the flatteries, I fell into such a frame of satisfaction that, seeing the second omelet nearly finished, I asked the host whether he had any fish. "I have a fine trout," he replied, with a knowing glance at my guest, "but it is expensive and—I fancy—rather too good for you." "What do you mean by 'too good'?" burst out my flatterer. "Bring the trout at once and have no further care. Nothing is too good for Señor Gil Blas, who deserves to be treated like a prince." I was pleased to have him retort upon the inn-keeper in his own words, and with a frown I added angrily, "Bring your trout and another time choose your words a little more carefully." The inn-keeper, who desired nothing better, had the trout cooked and served to us. At this sight the eyes of my guest sparkled with delight, and the rascal threw himself upon the trout as he had done on the omelet, and scarcely stopped to breathe until he had filled himself up to the chin. Finally after eating and drinking until not another crumb could he hold, he put an abrupt end to the comedy by suddenly rising from his seat and saying, "Gil Blas, I am so well-contented with your kindness, that I am going to give you in exchange some good advice which in my mind you need. Do not trust people whom you do not know, and be especially on your guard against strangers who flatter you. They may be less considerate than I have been. A good dinner has sufficed for me and some sport over your credulity. Another might easily go farther. So, do not again make yourself a laughing stock, in believing that you are the eighth wonder of the world." Saying this, he burst into a loud laugh and left me.

In the preface to the *Gil Blas* is likewise a story taken from the Introduction to *Marcos de Obregon*. I will translate them both. Espinel says:

Two students were going to Salamanca from Antequera, the one very heedless, the other very inquisitive; one an

enemy alike to knowledge and to work, the other a close student of Latin. Unlike in everything else, they were equally poor. Walking one day through fields and meadows, ready to drop for thirst, they came to a well, where, after quenching their thirst, they noticed a small stone with an inscription half effaced by time and by the feet of passers-by. It read, "*Conditur unio, Conditur unio.*" The one asked, "Why did the drunkard say it twice?" The other made no reply but determined to look below the bark, and said, "I am tired and am not inclined to further fatigue to-day. Here I rest." "Rest then," rejoined his companion, "like the fool you are." So he remained, and when he was alone, he washed the stone clean and read the inscription. "A union is hid here." "Union!" he said, "a union is a precious pearl. Let us look a little deeper and see what the secret is." So he took a stick and pried up the stone and there he found a necklace and in the necklace a pearl as big as a nut, which with the necklace he afterward sold for four thousand crowns. He put the stone back and went his way.

That is Espinel's story in the Preface to *Marcos de Obregon*, and here is the one told by Lesage in *Gil Blas*.

Two students were traveling together on foot from Peñafiel to Salamanca. Feeling tired and thirsty, they sat down by a spring at the roadside. After resting and quenching their thirst, they happened to see a stone like a grave-stone lying flat and level with the ground, with an inscription on it half effaced by time and by the feet of the cattle who had come to drink at the spring. Their curiosity was aroused, and washing the stone with water, they succeeded in reading these words in Spanish, "Here lies buried the soul of the Licentiate, Pedro Garcia." The younger of the two students, a scatter-brained lad, read the words and burst into a roar of laughter, "What ridiculous nonsense!" he cried, "'Here lies buried the soul.' What!

Can one's soul be buried? Show me the ignorant fellow who wrote such a foolish epitaph!" So saying he arose to his feet and went off, but his companion reflected about the matter, saying to himself, "There is some mystery here, and I am not going to leave the place until I shall have sounded it." He lost no time, but taking out his knife he dug away the earth round the stone until he could lift it. Beneath, he found a purse, which he opened. Within it was a hundred ducats with these words in Latin, "I acknowledge you as my heir, whoever you may be, since you have had wit enough to comprehend the meaning of the inscription; but I caution you to make a better use of the money than I did of mine." With a glad heart the student replaced the stone and trudged on his way to Salamanca, carrying in his pocket the soul of Pedro Garcia.

Of course the story in *Gil Blas* comes from that in *Marcos de Obregon*. Lesage had no wish to deny it. It was a prouder feat to make it over than to originate it. Burton, in disparaging certain prepossessions that men have been wont to entertain against exile and imprisonment, exclaims, "What is a ship but a prison!" Dr. Johnson borrows the idea and, like Lesage, amplifies it. He says: "No man will get into a ship who has sufficient contrivance to get into jail. For to be in a ship is to be in jail with the additional risk of being drowned." When such men as Lesage and Johnson borrow, they return a hundredfold.

There are two other stories in *Gil Blas* which are taken from the *Marcos de Obregon*, that of Camila (lib. i., c. 16) and of Marcelina (lib. ii., c. 7.), but while Lesage makes no declaration of his indebtedness to Espinel, he makes no attempt to conceal it, since he does not even alter the names of Espinel's actors. Indeed in the story of Marcelina, as told by the barber's

assistant, he introduces Marcos de Obregon himself by name. Other slight indications of obligation occur here and there in *Gil Blas*,—the name of the famous Dr. Sangrado, for instance, was suggested by the Dr. Sagredo of Espinel, but Lesage has improved everything that he has borrowed, and his plagiarisms constitute so insignificant a part of the merit of *Gil Blas* that they might be entirely removed, without impairing in any respect the delight that the book affords. It would be like removing one or two side-dishes from a dinner of a hundred courses, where there yet remains a superfluity of pleasures,—a surfeit of delights.

Having considered at some length the accusation of Voltaire concerning *Gil Blas*, I must now spend a moment on a charge that would not be of any importance if it were not sustained by two Englishmen for whose judgment much respect is properly entertained, Hazlitt and Scott. The former says (*Comic Writers*, p. 219, edition 1817): "The *Guzman de Alfarache* has the credit without any reason of being the original of *Gil Blas*." This supposition I have not discovered among any of the Spanish critics, and at first it seemed to me probable that Hazlitt was deceived by an equivocation or was inclined to hazard a conjecture; but Scott in his life of Lesage remarks:

If *Gil Blas*'s history had a prototype among the Spanish stories, it must have probably [sic] been in that of *Guzman*; and some slight resemblance may be discovered betwixt some of the incidents; for instance the circumstances in which *Guzman* is about to marry the daughter of a wealthy Genoese, and that of the excellent Don Rafael in the house of Pedro de Moyadas.

Scott at times wrote very carelessly and very hurriedly. He speaks of *Lazarillo de Tormes*, for

example, as having been written by Juan de Luna, whereas it was only one of the numerous (if the best) of the continuations of *Lazarillo* that was written by H. de Luna. Similarly in the matter before us, the name of Don Rafael's prospective father-in-law was not Pedro de Moyadas but Jeronimo Miajadas. He also names Vicente Espinel, "Vincentio Espinella," wherein the author of the *Guzman* ceases to be a Spaniard without becoming an Englishman. However, a careful reading of the two narratives shows that there is no resemblance whatever between them, except that in each case the marriage, for widely different reasons, does not take place. Because two men fail to get married does not make them look alike. The truth probably is that Hazlitt misunderstood a remark of Sismondi and that Scott followed Hazlitt and neglected to verify the reference. What Sismondi actually says is this, and it is the strict truth: "The romances of *Guzman de Alfarache*, and of *Picara Justina*, together with many others, have been translated into almost all languages, and were the models of *Gil Blas*" (Roscoe's trans. London Edition, 1823). What Sismondi neglects to state, however, is that the *Guzman* was translated by Lesage himself, who published it under its Spanish title in 1732, three years before his own *Gil Blas*, in its completed form, was finally given to the world. That ought to satisfy any one who never read the *Guzman* that no plagiarism was either committed or intended.

For what is plagiarism? Terence took his *Phormio* from a play of Apollodorus, Molière took his *Scapin* from Terence, Otway took his *Cheats of Scapin* from Molière. The *Festin de Pierre* of Dorimon is from the *Burlador de Sevilla ó el Convidado de Piedra* of Tirso

de Molina. Dorimon made a mistake in turning the title into French; Molière copied Dorimon and reproduced the error; Corneille turned it into verse, Byron into a poem, Mozart into an opera, Shadwell into ridicule. In French, German, and English, it has also assumed various additional forms. *El Diablo Cojuelo* became *Le Diable Boiteux* and *The Devil on Two Sticks*. Corneille took his *Cid* from Guillen de Castro. The Spanish drama has been for centuries an inexhaustible mine for foreign exploitation. *The Vicar of Wakefield* smacks of Joseph Andrews. The source of almost all of Shakspere's plays is known,—Plutarch, Bandello, Boccaccio, Holinshed. One could write a book on plagiarisms without consulting an authority. Where did Sterne get his *Tristram Shandy*? We are told that his style came from *Pantagruel* and his learning from *The Anatomy of Melancholy*. Reproductions, imitations, adaptations, translations, who can calculate their range? Molière boasted that he took his own wherever he found it. *Pereant qui ante nos nostra dixerunt!*

Well, all this is not plagiarism. The events of human life are common to all writers alike. No one can monopolize them to his own use. Plagiarism arises only from concealment, or an attempt at concealment. It is not a material fact,—it is the feeling of shame, *that* is what constitutes plagiarism. Shame demands concealment. So long as one's conscience does not rebel, there is no theft. In other words, the distinction lies not in the act but in the intention. But in this lies also, as we have seen, the distinction that constitutes the picaro, and sets him aside from other men. Therefore, all men of letters have in them more or less of the picaro; for who is there, eminent in the literature of

England, excepting perhaps Dr. Jonathan Swift and Charles Dickens, against whom the charge of borrowing without acknowledgment can not be proved? All have sinned and come short of perfect originality. Nor is there any single word or idea, either in this paragraph or in the whole essay that you are now reading, that can make the least pretense to exemption from the charge of being taken, directly or obliquely, in whole or in part, after the manner of the true picaro, from some earlier and better source. I have simply dipped my bucket into the common spring, and the water is mine.

It is then because something of the picaro exists in all mankind that his exploits, his "adroit feats of cunning and deception," as Bouterwek aptly calls them, find such a universal response in the human heart. He is human, sympathetic, lovable. As Falstaff says, he offends none but the virtuous. His errors are the pardonable errors of permanent immaturity. We intuitively recognize in him certain fundamental features of humanity. Indeed, on no other condition could we tolerate any representation whatever. Violence and intrigue, crime and the detection of crime, all lie beyond his radius of action. Nor is there any consistent virtue in his character. He occupies, as I said earlier, an intermediate position, a neutral field. In one of the continuations of *Lazarillo de Tormes*, the writer, H. de Luna, runs a parallel between picaros and philosophers; but he cannot be said so much to compare them as to identify them. Their identity needs not to be discussed, for even their similarity is superficial and dubious. The same writer introduces into the narrative a philosophic picaro in the person of a hermit.

Here [said the anchorite to Lazaro], here have I lived for twenty years, far from the busy world and the strife of men. Here have I found a paradise on earth, here I meditate upon divine and human affairs. Here I fast when I am full, and eat when I am hungry; here I wake when I cannot sleep and sit alone when company fails me; here I sing when I am happy and grieve when I am sad, work when I am not resting and rest when I am not at work.

This is all the philosophy of a picaro. Con Cregan's pretended escutcheon,—“arms of assumption” in other than the heraldic sense,—which consisted of a half-closed eye surmounted by a crown and with the motto, “*Maybe-not,*” was perfectly in keeping with the Irish type of the picaro. Long before Saint Pierre uttered the saying “Nature is always virtue,” the picaro illustrated it. His motto was *Sequere Sortem* (Follow chance). Casanova altered this motto without changing it. He said: *Sequere Deum*, by which he meant, “Follow your impulses,” as if the path to God lay in the line of least resistance to evil.*

In spite of his acknowledged failings, we sympathize entirely with the picaro. When Teresa de Manzanares passes herself off on the aged captain, Don Sancho de Mendoza, as his daughter who at the age of five years was stolen from Malaga by Moorish pirates; and, sustained by adequate certificates, is acknowledged by him and presented to all his relatives and received by them with every mark of recognition and joy; and when, after sustaining for two months, her rôle of long-lost and newly-found daughter, to every one's satisfaction, she is miraculously exposed by the sudden

* Cato said to Lælius in the *De Senectute*: “*In hoc sumus sapientes, quod naturam optimam ducem, tanquam deum, sequimur, eique paremus.*” So Cato furnished the idea to Saint Pierre and the motto to Casanova.

arrival of the real daughter and expelled from the house;—we experience a keen regret that her deception was so brief and her departure so ignominious. She was such an engaging young woman and took up her new part so admirably that we are not surprised at the success of her next venture, when she appears on the stage and within a few weeks succeeds to the position of leading lady in a traveling company of actors.

Our sympathy for the picaro is especially manifest on those occasions when he offends us, for the greater his delinquencies, the more are we offended. When Gil Blas has attained to the position of confidential secretary to the Premier of Spain, and has in his hands the disposal of public offices, José Navarro, his benefactor, applies to him on behalf of a friend for whom he desires to secure a position in the public service. Gil Blas sells the office to another for a thousand ducats, pockets the money, and lies to Navarro. We are grievously offended. When he insults Fabricio, the friend of his youth, and neglects to succor his own aged and starving parents, we cry out, "Shame on you!" and throw down the book in a passion of resentment. You see, the rogue has wound himself into our hearts. When he submits to become the agent in the hands of the Duke of Lerma to corrupt the young prince, and is imprisoned in the Tower of Segovia, we feel that he has received a far lighter punishment than he deserves; yet such is his appeal to our sympathies that we are glad when he is released and finds a portion of his ill-gotten wealth preserved for him. Now, if these had been merely infractions of conventional law, we would not feel such keen anger at their commission. It is because they offend something deeper than the law of the State—the *lex*; it is because they violate the principle of

natural law,—the *jus*,—the law of gratitude, of filial affection, of dignity, and of decency, that they produce in our minds such indignation and resentment.

Such feelings are, however, evanescent. They yield quickly to the charm of the picaro, for this remarkable character possesses the strange faculty of retaining our respect amid all the devious vicissitudes of a dubious career. We feel that he has not become corrupted by misfortune and roguery,—that his heart remains good. We are inclined to believe that Teresa would have made a much better daughter to Don Sancho de Mendoza than his own; we recognize Gil Blas to be better than his masters,—Dr. Sangrado, the Archbishop of Granada, the great Duke of Lerma; Lazaro himself is superior to the men he serves. He asks for so little,—some food, and a place where he may sleep quietly, and an occasional respite from the incessant blows of hostile fortune,—that we cannot refuse him our sympathy. A mere waif, he makes an irresistible appeal to our hearts, and therein lies the secret of the success of the picaro in fiction.

X

ON THE PREVENTION OF DISEASE

IT often happens in the practice of medicine that certain psychic considerations intervene to limit the degree of candor with which the physician can discuss with each individual patient the character, extent, and outcome of his disease. Courage being at times a curative agent, it ought not to be impaired by indiscreet or premature disclosures. This is, however, to be determined by the necessities of each individual case. But when the theme is the conservation of public health, not only must matters be discussed frankly, but the apathy of the public mind must be dispelled. Socrates likened himself to a gadfly, to sting the people of Athens into action. A similar emphasis and earnestness are needed to-day, that the achievements of the past thirty years in the study of the infectious diseases may produce their due fruit.

Notwithstanding the antiquity of medicine, it has been within the last century only, that the care and protection of the public health has had any intimate and understood connection with the practice of medicine, whose previous work was solely concerned with the treatment of cases of individual disease and with the prolongation of individual lives. When the Republic

of Venice devised a system of quarantine whose purpose was to exclude the plague from the territory of the Republic, the commission that was appointed by the Council of Ten included no physician among its members, and when the plague raged over Europe, depopulating towns and destroying nine tenths of the inhabitants of whole provinces and states, the functions of the physicians were not thought to extend to any general regulations to prevent the spread of the epidemic. It is of course still true to-day that the enactment of quarantine regulations is a matter that falls within the scope of the legislative body of the state, and their enforcement remains the duty of the civil police, and yet no quarantine station could exist to-day that was not under the immediate supervision of a competent board of physicians. Inasmuch, then, as quarantine was destined sooner or later to fall within the circle of medical duties, and since it was the first effective step in the seclusion of infectious diseases, no sketch of preventive medicine, however brief, can ignore it.

The middle of the fourteenth century witnessed the greatest plague that ever befell Christendom. To the ravages of smallpox the world had become long since accustomed. That was a toll that was expected, a tribute that, however severe, had become endurable by custom. Europe was reconciled to the devastation of smallpox as India was reconciled to a tax on salt. It had been exacted for a thousand years, and the states of Europe had paid an average annual tribute of two hundred thousand lives. It was severe but unavoidable, and was paid as a matter of course, because there was no escape. Nor in this is there as yet any occasion for wonder. That is a feeling that perhaps our descend-

ants may have a right to entertain, when they shall have put an end to the present ravages of tuberculosis and pneumonia, which we endure to-day in the same spirit of resignation with which our ancestors paid the similar tribute levied by the smallpox. The two cases are furthermore alike in extent as well as in kind, for the annual death-rate in the United States alone from tuberculosis is one hundred and sixty thousand.

But when the plague appeared, a great terror fell upon the world, for where the smallpox levied a tribute, the plague demanded all; where the smallpox exacted a sheaf, the plague seized the whole harvest. Under the spell of this panic, people died without attendants and were buried without the services of the Church; the father deserted his son and the son fled from his father.¹

Boccaccio was thirty-five years old when the plague invaded Florence, and his description has therefore the validity of an eye-witness. While the priests deserted their altars, and while thieves in broad daylight pillaged the palaces of the nobles, no authority, either civil or religious, interposed to compel the one or to punish the other.

In the spring of 1348 this scourge fell on Italy. It attacked all ages, sexes, and ranks, and even the domestic animals. Many patients died within a few hours, even before any fever developed. Glandular swellings appeared, then black spots on the body, in some cases nosebleed,—and the patient was dead. Few of those attacked saw the third day. In some cases the disease attacked the lungs and none of these survived.

¹ “Gentes moriebantur sine servitoribus, et sepeliebantur sine sacerdotibus; pater non visitabat filium, nec filius patrem; charitas erat mortua, spes prostrata.”—Quoted by HECKER.

Throughout France and England it is estimated that but one in every ten inhabitants escaped death. In Paris over sixty thousand died; in London one hundred thousand; in Venice one hundred thousand. Among the Franciscan friars, one hundred and twenty-five thousand died in Germany alone, and thirty thousand in Italy. These form a part of the recorded deaths, in fifteen cities alone, during nine months of 1348, of seven hundred and thirty-eight thousand people. The full record would reach into the millions. In fact one actual estimate mounts to twenty-five millions.

Venice was still the most advanced state in Europe in the fourteenth century. From her throne at the head of the Adriatic, she ruled the commerce of the world.

She held the gorgeous East in fee,
And was the safeguard of the West.

The safeguard from the Turk, but the port of entry for the plague, coming as it did in Venetian vessels from Oriental cities. But she was the only state in the world that attempted to stay the pestilence, and the expedient which she devised is still in use in New York City, the quarantine.

We are accustomed to ascribe to Jacob Bigelow the credit of our early knowledge of the self-limitation of many diseases,—diseases which he described finely as “of settled destiny,”—and yet the most ancient physicians recognized what they called “critical days,” after passing which they observed that their patients usually got well. Some of these critical days were determined by what were considered to be astral or telluric influences, and among them was the fortieth day from the beginning of the disease. This was the longest period generally recognized, and this deter-

mined the duration of the first preventive measure adopted to ward off disease, forty days, after which time the danger of infection was thought to have passed. The name and the principle survive, though the period has been shortened.

A hundred years later (1448), the Council of Ten, who ruled Venice, appointed a Board or Council of Health, which became a permanent institution. There were no physicians among its members, who are described as "three prudent persons who are directed to investigate the best means of preserving health, and to lay the result of their inquiries before the Council of Ten." During this hundred years since the first appearance of the plague, and while Venice was perfecting her quarantine system, other measures for the preservation of public health had been attempted in different parts of Europe. In some places the house containing an infected person was nailed up, doors and windows were sealed, and the inmates were left to die without help. In some cases even, the house, after being nailed up, was set on fire to destroy infection. The "Shutting up of Houses" was adopted during the epidemic of the plague that visited London in 1603, about the time of James I.'s accession, and it was renewed in the year of the Great Plague in 1665, but as Defoe laments, it merely added individual suffering to general calamity. Defoe estimates the mortality from the plague when it raged in London at ten thousand a week.

One regulation, which originated with the Viscount Bernabo of Reggio in Calabria, is dated January 17, 1374.

Every plague patient was to be taken out of the city into the fields, there to die or to recover. Those who at-

tended upon a plague patient were to remain apart for ten days before they again associated with anybody. The priests were to examine the diseased, and point out to special commissioners the persons infected, under punishment of the confiscation of their goods and of being burned alive. Whoever imported the plague, the State condemned his goods to confiscation. Finally, none, except those who were appointed for that purpose, were to attend plague patients, under penalty of death and confiscation of goods.

In 1399, Viscount Giovanni, successor to Viscount Bernabo, ordained

that no stranger should be admitted from infected places, and that the city should be strictly guarded. Infected houses were to be ventilated from eight to ten days, and purified by frequent fires and fumigations with aromatic substances. Straw, rags, and the like were to be burned, and the bedsteads which had been used, set out for four days in the rain or the sunshine, so that the morbific vapor might be destroyed.

The disinfectant effect of fire and sunlight had been already demonstrated.

There were sixteen outbreaks of the plague during the second half of the fourteenth century, and during the fifteenth century they were still frequent. In 1403, the first lazarettos were established by Venice on two of the smaller islands, and rigorous regulations enacted. In 1467, Genoa, following the example of Venice, also instituted a lazaretto, or quarantine station. In 1504, the powers of the Board of Health of Venice were increased by granting them the right of life and death over those who violated these regulations, and every year of this century saw the enactment of additional laws for the preservation of the public health and for the security of commerce.

In Boccaccio's observation as to the extension of the plague to the lower animals lay the unconscious seed from which later observers have developed the theory of infection through rats, mice, and squirrels. This source of infection seems amply demonstrated by the investigations made when the plague broke out in San Francisco in 1903, at which time the bacillus pestis was detected in these animals. Yet if we are to yield a reasonable credence to any of the histories of the plague that are now open to us, we can hardly believe that these animals are the sole source of infection.

Of the London plague of 1665, Defoe says:

The manner of its coming first to London was by goods brought over from Holland, and brought thither from the Levant, the first breaking of it out in a house in Long Acre, where those goods were carried and first opened, its spreading from that house to other houses by the visible unwary conversing with those who were sick, and the infecting the parish officers who were employed about the persons dead.

His description might almost have been quoted from that of Boccaccio.

Many persons [Defoe says], in the time of this visitation, never perceived that they were infected, till they found to their unspeakable surprise, the tokens come out upon them; after which they seldom lived six hours, for those spots they called the tokens were really gangrene spots, or mortified flesh, in small knobs as broad as a little silver penny, and hard as a callus or horn; so that, when the disease was come up to that length, there was nothing that could follow but certain death, and yet, as I said, they knew nothing of their being infected, nor found themselves so much as out of order, till these mortal marks were upon them.

Moreover, the rapidity and extent of the infection could not alone depend for its transmission upon any of the lower animals, which are in no instance of adequately migratory habits. What animal but man could transmit the plague from Genoa to London and Vienna, across broad fields, lofty mountains, and difficult seas? The range of these animals is very small. In Manila, the infected rats were seldom found more than a few blocks away from the ascertained foci of rat-infection. Mice are confined to a still smaller radius, and squirrels do not often travel to any distance from their wonted haunts. Fleas that have become infected might be carried to any distance by their hosts. When Zagloba was flying from Bogun, he shouted in terror, "I shall be killed with all my fleas." That statement was scientifically inexact. His fleas could easily find another host. Zagloba might more rationally have exclaimed in the words of Robert Burton, "Mine to-day, his anon,—whose to-morrow?" To be sure Burton was not speaking of fleas but of riches.

Three varieties of the plague are described, the bubonic, the pneumonic, and the septicæmic, but in the great epidemics the three distinct kinds combined to form one true and only type. The so-called pneumonic form is thought to be the only one which is directly transmitted from the sick to the healthy, but it is very probable that it is merely the most easily transmissible.

Until this time, then, as we have seen, two methods of preserving public health had been developed; the first being the destruction of the infected, the second, their exclusion. The cruelty of the first put a swift end to that expedient,—begotten by terror upon

inhumanity,—and the states of Europe relied more and more upon the protection afforded by quarantine, whose benefit is attested by its extension from Venice throughout Christendom.

After the cessation of the Black Plague [says Hecker], a greater fecundity in women was everywhere remarkable—a grand phenomenon, which, from its occurrence after every destructive pestilence, proves to conviction, if any occurrence can prove it, the direction of a higher power over general organic life. Marriages were, almost without exception, fruitful, and double and triple births more frequent than were otherwise known.

A complementary reflection invites consideration to-day, when with the control of the devastating pestilences that ravaged Christendom, and with the average duration of human life lengthened by ten or twelve years, there exists such a diminution in the birth-rate as to occasion much disquietude among the students of sociology. Perhaps their fear is as unnecessary as was that of Malthus over the increase of population.

Certainly, with a diminishing birth-rate, there is a lessened likelihood of destructive wars. Certainly, also, the period when the population of Europe was suffering under the annual scourge of pestilence, the wars that were waged were almost bloodless. Unconsciously, perhaps, humanity was protecting itself from additional losses. Machiavelli says that in the battle of Anghiari, in 1439, between Niccolo Piccinino and the Florentines, Niccolo was defeated after a battle of four hours which was stubbornly fought.

Never [says Machiavelli] was there an instance of wars being carried on in an enemy's country with less injury to the assailants than at this time;—for in so great a defeat,

and in a battle which continued four hours, only one man died, and he, not from wounds inflicted by hostile weapon, but having fallen from his horse, was trampled to death.

In 1467, at the battle near Imola, in a war between Florence and Venice, "they came to a regular engagement, which continued half a day, without either party yielding. Some horses were wounded and some prisoners taken, but no death occurred." Elsewhere he says that, at this time, "wars were commenced without fear, continued without danger, and concluded without loss." Machiavelli ascribes these bloodless encounters to the superiority of defensive armor over offensive weapons, and to the cupidity of the combatants, who desired the ransom that would be paid by the captives that they might take. Truly, dead men paid no ransom, but neither did the common soldiers, who, moreover, wore no protective armor, and who, one would imagine, might seem to run some risk in a hard-fought battle.

Now the reflection is obvious, that by some higher power, acting directly, and acting without delay as without hesitation, mankind was prevented from adding the destruction of war to the ravages of pestilence, and was even strengthened and multiplied in order that the loss of life resulting from the Black Plague might be repaired. This cannot, of course, be affirmed, but perhaps it is as hazardous to doubt as to believe, that by some automatic reaction or readjustment, Nature (whatever the word may mean), in her beneficent purpose to restore the impaired equilibrium of human affairs, brought into action a conservative energy, which, perhaps, we might recognize more frequently if our eyes were fully open to it.

We are accustomed to the exercise of the power which pours out the callus between the ends of a broken bone, but we forget that Nature is not confined to cell-life in the manifestation of her energy.

Quarantine, then, as a principle directed to the restriction of individual liberty, was as respects its purpose, not so much a measure for the prevention as for the exclusion of disease, and its practical enforcement was less a matter of medicine than of police. At this point the principle of preventive medicine rested for many generations. Quarantine regulations were gradually developed and were adopted by a continually increasing number of cities. The value of practical sanitation became established throughout Christendom. Sewers were introduced, and one might, after dark walk the principal streets of the most elegant of European capitals, without listening for the *Gare à l'eau!* which if unheeded brought disaster to pedestrians. Public cleanliness (sanitation) was enforced by municipal ordinances, and personal cleanliness (hygiene) followed close upon the general improvement in social customs.

It is to Turkey that we are indebted for the next great step in preventive medicine. During these centuries, Europe was still paying her annual tribute to that ruthless Minotaur, the smallpox, and her Theseus came from Turkey, and was named Lady Mary Wortley Montagu.

In a letter dated from Adrianople, April 1, 1717, Lady Mary wrote:

The Smallpox, so general and so fatal amongst us, is entirely harmless by the invention of *ingrafting*, which is the term they give it. There is a set of old women who

make it their business to perform the operation every Autumn, in the month of September, when the great heat is abated. People make parties for this purpose, and when they are met (commonly fifteen or sixteen together) the old woman comes with a nut-shell full of the matter of the best sort of the Smallpox, and asks you what vein you please to have opened. She immediately rips open that you offer to her with a large needle (which gives you no more pain than a common scratch), and puts into the vein as much matter as can lay upon the head of the needle, and after that binds up the little wound with a hollow bit of shell. On the 8th day the fever begins to seize them, and they keep their beds for two days, very seldom three. Every year thousands undergo the operation. There is no example of any one that has died of it; and you may believe me that I am well satisfied of the safety of this experiment, since I intend to try it upon my dear little son. I am patriot enough to try to bring this useful invention into fashion in England.

On Sunday the 23d of March, 1718, she wrote to her husband, who was the English Ambassador to Turkey and was detained in Constantinople by his duties:— “The boy was ingrafted on Tuesday, and is at this time singing and playing, very impatient for his supper. I pray God my next [letter] may give you as good an account of him.”

The next year she returned to England, and in 1721 she caused her little daughter to be also inoculated or *ingrafted*. In both her children the result was satisfactory. The new process excited much hostility. It had the objection of having been already rejected by the medical profession when, toward the close of the previous century, two Italian physicians, Pilarini and Timoni, sent an account of the practice to the Royal College of Surgeons of London, who published

it in the *Philosophical Transactions*, where it was buried in the fifth volume.

Now in 1721, and thenceforth for some years, the profession of medicine refused to adopt it, the clergy denounced it, and Lady Mary was abused and defamed as an unnatural mother and a doubtful Christian. Still, the Princess of Wales was her stanch friend, and after a few experiments in inoculation convinced her of its harmlessness and of the protection that it promised, she had two of her own daughters subjected to the process without ill result. I cannot find the exact date of this fact, but it must have been prior to 1727, since in that year the accession of George II. made her Queen of England. In this same year, 1727, Voltaire recommended inoculation to the ladies of the French Court, informing them that by this means the women of Circassia and Georgia had preserved the beauty for which they had long been distinguished. By 1746, the progress of inoculation had secured such general sanction among the physicians that it came into use in the smallpox hospital in London. In 1748, Dr. Mead wrote a treatise in favor of it, and in 1754, the College of Physicians published a strong recommendation of it. It was only after the successful experiments of Jenner in 1796, that it began to be superseded by vaccination, and it had long since so fully established its efficacy that it was relinquished with much regret and after serious opposition. In fact, Parliament had to interpose the authority of law, and on the 23d of July, 1840, the practice of inoculation was prohibited by the act of Victoria (4, c. 29), entitled, "An Act to Extend the Practice of Vaccination."

Not without reason did Parliament intervene to prohibit inoculation, when once the full value of vacci-

nation had become established beyond rational dispute. While vaccination was unattended with danger, inoculation had a mortality record of about three per cent. Again, while inoculation gave adequate protection to the individual, it afforded no security to the community, since, during the reaction of inoculation, the disease was communicable as the true smallpox. The period of infection was shortened, but the patient who was himself undergoing the process of immunization, was nevertheless a menace to society.

In 1721, the year when the second child of Lady Mary was inoculated, Dr. Zabdiel Boylston of Boston introduced inoculation for the smallpox into America. Out of two hundred and eighty-six persons whom he treated by this method, only six died, and in spite of the hostility of the public, he had the satisfaction of knowing, during his life, that the procedure had proved its immense value in the eyes of the profession of medicine as well as in those of the people. He died in 1766, four years later than Lady Mary, who also, before she died, witnessed the triumph of inoculation throughout England.

In 1798, Edward Jenner published his first paper on the cow-pox (*vaccinia*). In 1803, the vaccine virus was introduced into this country simultaneously by Dr. Waterhouse of Boston, and by Dr. Hosack of New York. About the same time President Jefferson caused a supply to be brought for use in the Southern States, and the final conquest over the smallpox was accomplished. It has been remarked that in the paper published by Dr. Jenner in 1798, no claim is made by him to the discovery of the efficacy of the vaccine virus. In fact, there seems to be but little doubt that the original discovery was not made by Jenner. There

is a well-authenticated account of some experiments made as early as 1774 by a farmer in Purbeck, England, named Benjamin Testy, which manifested the preventive efficacy of vaccine virus. He vaccinated his wife and two sons with the contents of a vaccinia pustule, and several years later inoculated them and some other people with the contents of a smallpox pustule. The rest reacted to the inoculation, but those who had been vaccinated failed to show any symptoms. These and other experiments are accredited to Mr. Testy, but it is doubtless true that they would never, or might never, have attracted the public attention, if it had not been for the successful results of Dr. Jenner's procedure.

Priority of fact seems insufficient of itself to vindicate a casual claim such as that of Mr. Testy.

That man [says Sydney Smith] is not the discoverer of any art who first says the thing; but he who says it so long, and so loud, and so clearly, that he compels mankind to hear him; the man who is so deeply impressed with the importance of the discovery that he will take no denial, but at the risk of fortune and fame, pushes through all opposition, and is determined that what he thinks he has discovered shall not perish for want of a fair trial. Other persons had noticed the effect of coal-gas in producing light; but Winsor worried the town with bad English for three winters before he could attract any serious attention to his views. Many persons broke stone before Macadam, but Macadam felt the discovery more strongly, stated it more clearly, persevered in it with greater tenacity, wielded his hammer, in short, with greater force than other men, and finally succeeded in bringing his plan into general use.

A discovery to be of value must be effective and must be recognized as effective. Indeed the word "discovery" may quite properly be restricted to this

process of bringing out or opening up to public use, the principle in question.

What a grim irony lay in the early description of smallpox as a disease of childhood! At the very threshold of life lay this ogre which attacked those who sought to pass. It was a disease of childhood, because all adults had survived the attack. Smallpox was the Sphinx, whose riddle one must answer to live,—it was the door through whose frowning portals lay the road to manhood and womanhood.

Until the middle of the nineteenth century the principle of preventive medicine rested upon these achievements. The plague and the smallpox were conquered forever, and humanity drew a long breath. In 1822, less than a month before Jenner died, there was born in the town of Dôle, a few leagues from Dijon, a Frenchman who was to carry preventive medicine onward to achievements that Jenner could not foresee. Few lives are as instructive, very few have been as useful, as that of Pasteur. Smitten with paralysis of half his body, in the midst of his career, he still survived, a cripple, to perfect those wonderful experiments whose results have placed his fame high among the benefactors of mankind. His father was an old soldier of Napoleon, who, broken in health and overborne with years, took up the trade of a tanner in Dôle, married and had one son, Louis. This lad was sent to the École Normale in Paris, when of suitable age, and before graduating became an assistant in the Chemical Laboratory.

When still in his early twenties, he became engaged in a controversy with Mitschelich, a chemist of established authority, over certain properties of the tartrates and paratartrates of ammonium and soda. The pro-

gress of the controversy itself is of interest only as it directed Pasteur's mind, at an early age, to the phenomena of fermentation, which with few distractions was destined to engage his energies through his whole life. Glucose is familiar to every one to-day in its commercial use as a substitute for cane sugar, but the term is one which includes a whole group of sugars which vary among themselves in their properties as disclosed by the polariscope. Dextrose is the name of that variety of glucose which deflects the ray of polarized light to the right, and levulose of another variety that turns the polarized ray to the left. Well, Pasteur discovered the same dissimilarity between two tartrates which seemed in all respects identical. After making a solution of both of these tartrates and letting the test-tube stand undisturbed for a few days, he discovered a film floating in the test-tube, and on examining the solution, he found that one of his tartrates had disappeared. A series of similar tests with various solutions proved that the film was in reality a living organism which was competent to select its own food. Further observations convinced him that the production of alcohol from sugar and that of vinegar from alcohol, the production of wine from grape juice and of beer from malt, constitute phases of the process of fermentation.

He then set himself to study the causes of what he regarded the "maladies of wine," and discovered that if the wine after being bottled was exposed for a minute or two to a temperature of 122° Fahrenheit, the production of ferments injurious to its taste was entirely stopped. The ferments were killed. Pasteur's discoveries in the preservation of wine and beer, which strangely enough led him into the study of infectious diseases,

were said by Huxley to have resulted in an economic gain for France, which was more than sufficient to pay to Germany the war indemnity of one billion dollars exacted in 1871 by the Treaty of Frankfort.

The next step was taken when the French Government requested him to study the causes of the silkworm disease and discover a cure for it. The production of silk was one of the most important and profitable industries in France. Especially in the Southern Departments of the country, it was the principal industry, as cotton-growing is in Mississippi and Alabama. What the long reaches of meadow land are to the farmer, what the Banks of Newfoundland are to the cod fisheries, such and more was the silkworm to the South of France. The returns from this industry were between one hundred and twenty million and one hundred and forty million francs annually. In 1849, the silkworms began to die, and their destruction was so rapid and so extensive, that the profits fell to twenty million francs and threatened to vanish entirely. Eggs were imported from Italy and Spain for a year or two, the industry revived and then again languished. The Southern Departments of France were confronted with immediate ruin. Eggs were brought from the Grecian Archipelago, from Turkey, from Syria, but in those countries too the plague soon declared itself, and the importation of eggs was discontinued as useless. It was then that aid was sought from Pasteur. He had never seen a silkworm, but he left Paris at once for Alais, a town in the silk country, twenty-five miles west of Avignon, and began his researches. The cause of the silkworm plague was soon discovered to be a parasite that, arising in the moth, appeared in the eggs and destroyed the worm. An appropriate treat-

ment was instituted, and the silk industry at once revived to its wonted proportions of activity and profit.

"It was no hypothetical infection," said Pasteur, "no problematical pythogenic gas, that killed the worms. It was a *definite organism!*" This conviction opened up to his mind the immense possibilities that his recent discoveries had revealed, in the etiology and prevention of contagious diseases, and to an enthusiastic friend, who congratulated him on his solution of the silkworm disease, he replied: "You will see what all this will lead to. Greater things lie ahead of us."

Two problems have vexed mankind since the beginning, one involving the past, the other the future; and both, though for different reasons, still remain unsolved. One is the origin of life, the other its destiny. With the second problem science has thought fit not to meddle. With the first it has constantly occupied itself. "All dry bodies which become damp," said Aristotle, "and all damp bodies which are dried, engender animal life." When Samson found a swarm of bees in the dead lion, he followed the belief of his time in thinking it the birth of a new life arising from decomposition. Ovid¹ voices the same belief. *De putri viscere passim florilegæ nascuntur apes.* Van Helmont, a physician of the seventeenth century, asserted that he had himself made a conclusive experiment in the production of life. He put some wheat in a bottle and stoppered it with a piece of an old shirt. In three weeks the wheat had been transformed into mice. *Quot gramina, tot mures.* He says: "The mice are produced of full size, both male and female. To reproduce the species you have only to pair them."

The first scientist who disputed the prevalent theory

¹ *Met.*, xv., 365.

of spontaneous generation was an Italian, Redi. He proved that maggots do not arise in beef when the beef is covered with gauze to keep the flies off. Still the doctrine of spontaneous generation was by no means dead. Buffon advocated it. Needham, in spite of his clerical vows, espoused it. In 1858, M. Pouchet, Director of the Museum of Natural History at Rouen, declared that he had positively succeeded in proving in a manner absolutely certain, that microscopic living organisms were produced without germs and were certainly a new creation of life.

Pasteur was led to take up anew his experiments in fermentation. His previous studies had convinced him, but he must oppose and overthrow the belief of ages, he must convince the scientific world that spontaneous generation could not exist. He performed a hundred experiments, of which the process was varied in many details, but which consisted in overheating easily decomposable solutions, from some of which atmospheric air was excluded, while to others it was admitted. The results were uniform. When perfectly sterilized, no fermentation appeared, while in the presence of unfiltered air, fermentation invariably appeared. The doctrine of spontaneous germination was killed. Pasteur showed how the mice got into the bottle.

"A definite organism!" If there be no such thing as spontaneous generation, and if, as in the case of the silkworm, it can be proved true that diseases arise from a definite organism, there can be no such thing as spontaneous infection. Gradually the future opened upon this man's mind in gleams of revelation. The causes of disease must be discoverable, and indeed they were not far off and lay in his path.

Robert Boyle, who died in 1691, forty-seven years after Van Helmont, made an observation full of the prevision of genius, when he said: "The man who thoroughly understands the nature of fermentation will probably be much better able than he who ignores it, to give a fair account of the phenomena of certain diseases, which will perhaps be never properly understood without an insight into fermentation."

The disease in man that seemed to present the greatest analogy to the silkworm disease was called at that time splenic fever, later malignant pustule, and is known to-day as anthrax. It is not necessary to repeat or even to resume Pasteur's experiments on anthrax. The bacillus *anthracis* was detected and suitable preventive measures adopted. Then followed the examination of the cholera that attacked fowls, and finally the discovery of the character of septicaemia. By this time the world was convinced of the bacillary or bacterial origin of infectious disease. In 1865, Lister of Edinburgh adapted the results of Pasteur's discoveries to the prevention of wound infection, and the triumph of aseptic surgery opened a harmless path into the forbidden recesses of the human body, a path that comparatively obscure surgeons tread to-day with assured step and with the confidence of established impunity.

In February, 1874, Lister wrote to Pasteur:

It gives me pleasure to think that you will read with some interest what I have written about an organism which you were the first to study in your work on fermentation. I do not know whether you read the *British Medical Journal*; if so, you will have seen from time to time accounts of the antiseptic system, which for the past nine years I have been trying to bring to perfection. Allow me to take this

opportunity of sending you my most cordial thanks for having, by your brilliant researches, demonstrated to me the truth of the germ theory of putrefaction, thus giving me the only principle which could lead to a happy end the antiseptic system.

In February of 1876, Tyndall wrote to Pasteur:

For the first time in the history of science we are able to entertain the sure and certain hope that, in relation to epidemic diseases, medicine will soon be delivered from empiricism and placed upon a real scientific basis. When this great day shall come, humanity will recognize that it is to you that the greatest part of its gratitude is due.

Upon his work on fermentation reposes the whole edifice of the prevention of disease,—that noble edifice that forms so admirable an object of contemplation. To be sure others had worked and were still working for the common end, and Pasteur entered into their labors, for it seemed for a time that no hand but his had the power of producing effective results.

Cagniard-Latour and Schwann had recognized the yeast plant, but to Pasteur must be awarded its recognition as a living organism and the marvelous results of that recognition. Two Italian microscopists, Filippi and Cornalia, had detected in the silkworm the "corpuscles" that caused the infection, but they were contented with a conjecture as to the significance of these minute bodies, without discovering a method to get rid of them. A question occurred to them, but it was Pasteur who found the answer. Indeed, Cornalia wrote to Pasteur, when he learned that the French scientist had entered upon his investigations: "Your efforts will be vain. The healthy worms will become sickly through the influence of the epidemic demon

which reigns everywhere."¹ Pasteur contented himself with studying what he saw, and did not search for aërial demons, nor seek to discover the laws of stellar and planetary influences.

It is true, furthermore, that it had been always recognized that a single attack of any of the infectious diseases rendered the patient immune from a second attack. Those who had had the smallpox were employed as nurses for patients ill with that disease, as generally during the mediæval period as during the period of our own remembrance. Plague patients, too, who had recovered, were in demand to act as nurses during the prevalence of that disease. But it is mainly from Pasteur that we have learned what constitutes immunity to the second attack of infectious diseases. Here, doubtless, the practical work of Jenner was of much value to him. It was evident that the first attack had erected a barrier against the second. That door could not be opened twice. But by what process could a disease afford protection from itself? What was the nature of this toll which, once levied, permitted a man to travel through life without fear? What kind of a foe was this that gave a passport for life and continued to respect it?

The technique of bacteriological examination was then in its infancy, and bouillon, gelatin, and agar-agar, were not yet known to be the valuable culture-media that they have since proved to be. Pasteur had used, in his earlier studies, a solution of the tartrates and ammonia sterilized by heat, or a strained solution of the yeast plant; all media were rendered sterile by heat, then as now, before a culture was attempted. It happened while Pasteur was carrying

¹ *Life of Pasteur*, Radot, 1885.

forward other investigations, that three men, in Alsace, Turin, and Toulouse were studying the causes of an epidemic of so-called fowl cholera, which was devastating the farmyards throughout Europe, and following his example were experimenting on the affected animals with the methods that he had introduced. But they got no result. The micrococcus in question failed to develop. On the contrary, it died in the culture-media they used.

Pasteur took up the subject of fowl cholera when the others had failed, and succeeded in developing the germs in a bouillon made from the meat of the fowls themselves. It was strained to remove gross organisms and boiled to ensure absolute sterility. Some of the micrococci were then introduced, the test-tube closed with a loose pedgeot of cotton to filter the air, and a uniform temperature was maintained. The germs thrived and multiplied with amazing rapidity. Every day the experiment was renewed under identical conditions, except that each day a drop of the solution of the day before was added to the newly sterilized medium. After a hundred repetitions, the culture was as fatal to a healthy hen as on the first or second day. Within a few hours after receiving a drop from the hundredth test-tube, the fowl died with all the symptoms that marked the original infection. But this only established the identity of the organism and confirmed the cause of the disease. The great test was now made. Twenty hens were now inoculated,—“vaccinated,” Pasteur preferred to call it out of regard to Jenner—with a drop from some of the earlier test-tubes. Not only did they not sicken, but they were found, after this inoculation, to resist the most virulent culture from the latest test-tube. They were immune.

This must be regarded as one of the greatest achievements of applied science. When Pasteur made his modest report to the *Académie des Sciences* in Paris, the President, M. Bouley said, "This is but a beginning. A new doctrine in medicine opens before us, and this doctrine appears to me luminous with hope for mankind. A great future is preparing. I await it with the zeal of an enthusiast and with the confidence of a believer."

In 1880, Pasteur entered upon the study of anthrax, and France waited anxiously for the announcement of the result that would protect their cattle from the dreaded disease. No one could be nearer the heart of the common people than Pasteur, no one could respond so quickly and so directly to their needs. Early in the year 1881, the bacillus of anthrax was isolated and the vaccine developed. Hardly was his success known¹ when the President of the Agricultural Society of Melun invited him to "make a public test of his vaccination for anthrax." His colleagues attempted to dissuade him from committing a "scientific imprudence," by submitting prematurely to a public test, since a longer time and additional experiments were necessary to confirm his results, but he accepted the invitation and went to Melun. On May 5, 1881, the test began. Twenty-five sheep and six cows received each five drops of the attenuated culture of anthrax bacilli, and twelve days later they received a second dose, all the injections being made with an ordinary hypodermic syringe. On May 31st, these thirty-one animals, together with twenty-five sheep and four cows, received, also through the syringe, a dose of virulent anthrax bacilli. A final meeting was set

¹ His paper was read on February 28, 1881.—Radot.

for June 2d, to witness the results, thus allowing an interval of forty-eight hours after the virulent injection.

Over two hundred persons came to the final meeting, which was to test the accuracy of Pasteur's experiment. All the principal men of the Department were present, and they entered to inspect the test cases. Out of the twenty-five sheep which had not been vaccinated, twenty-two were dead and the other three were dying. The cows were barely alive, having no longer strength to eat, while the sheep and cows which had been vaccinated were perfectly well. That test was sufficient. Pasteur had to set up a manufactory for the preparation of anthrax vaccine. During that year he vaccinated thirty-four thousand animals, and the next year he vaccinated four hundred thousand more, nor has his procedure yet been superseded by a better.

In the case of fowl cholera, the development of the vaccine seems to have been due to the action of the oxygen of the air upon the virulent bacilli in the test-tube. Other action was excluded. In other diseases the attenuation of the virus must be sought by transplantation, that is, by the passage of the bacilli through some other animal. This procedure also was demonstrated by Pasteur, in his experiments on mad dogs. Here the saliva of the rabid animal was first used, but the results were confusing. The resulting infection was evidently a mixed one, for it was necessary to develop the vaccine before isolating the germ. In fact, the microscopical organism has not yet been conclusively identified. Several cultures were made from the saliva of a rabid dog, and these when injected into rabbits killed them, but since the rabbits presented a number of unexpected symptoms, the test could not be considered conclusive.

Realizing, then, that the place to look for the bacilli of a disease that produced madness, was in the brain, Pasteur began with a new series of experiments with the brain and medulla oblongata of the infected animals. The first rabbit died with every symptom of rabies, and a fresh culture was made from the brain of this rabbit and injected into a second one. Thus the inoculation was conducted, until after a dozen experiments, it was ascertained that while the virulence was in no wise diminished for rabbits, it produced no symptoms of rabies when the latest rabbit cultures were injected into dogs. The virus was become attenuated or benign for dogs, while it remained virulent for rabbits. A series of vaccinations of dogs was then undertaken, and it was ascertained that a true protective vaccine had been obtained.

Rabies (or hydrophobia, as it is still often called) is a disease to which all mammals are susceptible. Even birds may be inoculated. It is estimated that from ten per cent. to sixteen per cent. of the persons bitten by a rabid dog become infected and the mortality among those infected is one hundred per cent. The process that is above described for the preparation of the vaccine is, with some modifications, the one still in use.

The question very naturally arises how the vaccine can be of use to those who have been bitten. It is because the process of immunization or protection outruns the process of infection. In mankind there is a period (of incubation, as it is called), of forty days between the date of infection and the appearance of the symptoms of the disease. The vaccine requires only fifteen days to accomplish protection. This allows about three weeks of margin, and experience

has demonstrated that the system may prepare itself to withstand the attack while the foe is still lurking in the citadel. It is true, that no such treatment ought to be necessary. Rabies can be eradicated perfectly well by a movable quarantine called a muzzle. If all dogs were required to be kept muzzled for a period of two years, there would be no rabies. But the enforcement of such a law, however beneficent its result, is impossible so long as people are permitted to exercise the right of private judgment in matters of public health. The voice of common sense speaks with little conviction and less authority, to ears deafened by the absurd conventions of sentimentalism.

I have dwelt at length on Pasteur, because he embodies the spirit of modern preventive medicine. His were its earliest achievements, to him is due the enduring gratitude of humanity. Jenner owed much to fortune. He stumbled on a fact, but his virtue was that he perceived the immense value of that fact. In Pasteur there is a strange continuity of purpose, of thought, of achievement. His work was wonderfully symmetrical and consistent. Each step led to the next as inevitably as a series of consecutive syllogisms. His work seems orderly in a degree that transcends human direction. If Jenner saved his thousands, Pasteur saved his ten thousands. All bacteriology lay inchoate and in intention in Pasteur. His disciples became in their turn masters, but they were still his disciples. There was a modest courage in him that was admirable. He went to the test at Melun attended with the misgivings even of those who seemed to know him best, but he felt none. Quietly and unostentatiously, he did what he went to do, and returned without undue elation to Paris. In the early days of the

Second Empire, he applied to the government for an appropriation of three hundred dollars for his laboratory experiments and his request was refused. There was money enough for a Crimean War but none for humanity. Was not Pasteur worth a dozen Crimean Wars? But his work did not suffer.

An army of bacteriologists sprang up about him. His name had gone out through all the earth. Japan, South Africa, Russia, and Peru, were busy with the work of preventive medicine. During the seventies, Lister continued his experiments in aseptic surgery, and Koch studied tubercle bacilli in Berlin. In 1871, the bacillus of leprosy was discovered by Hansen, and Eberth in 1880 announced the discovery of the bacillus of typhoid fever. In 1883, the diphtheria bacillus was found by Klebs and later by Loeffler; Nicolaire isolated the tetanus bacillus in 1885, Afanassjew that of influenza in 1892, and Kitasato that of the plague in 1894. These discoveries were announced during Pasteur's life, and others have continued to be made until but few of the infectious microorganisms remain undetected. Strangely enough smallpox, scarlet fever, and measles remain among the diseases of obscure causation.¹ The process which is followed remains the same as that used by Pasteur and Koch. It is very simple and very conclusive. The germ must be developed and isolated in a suitable medium, transplanted in a susceptible animal, produce the same disease in the animal, and after being again developed and isolated a second time, prove to be the identical germ that was originally found.

To understand the way in which antitoxines protect the body, we must first learn what it is that they are

¹ *Preventive Medicine*, M. J. Rosenau, 1913.

to protect it from. Germs, to thrive, demand certain favorable conditions, for some of the most virulent of them are easily destroyed. These conditions are food, moisture, uniform warmth, oxygen, and absence of sunlight. These conditions all meet in the human body, for the oxygen that they need is furnished by the blood in the capillaries. The bacilli are not the disease nor are they the toxine that produces the disease, but in some way they succeed in forming or elaborating that toxine in the body. This process require savariable time in different diseases, and this period is called the stage of incubation. When the infection becomes general, when the system is flooded with the toxine, the higher centers realize that an enemy has invaded the place and they proceed to form an antitoxine to preserve the body from impending destruction. The first perceptible result of this reaction is a rise in temperature. It was a great word of Sydenham's that "fever was an engine that nature brought into the field to remove an enemy." The fever is really a beneficent agent. In some cases of extremely virulent infection, the patient succumbs to the attack before the temperature rises. This was often observed even by the first writers on the great plague of 1348,—even by those writers who, like Boccaccio, were not physicians.

Nature, then, proceeds to the defense of the body by producing an antitoxine, and somewhere from her vast resources and with a judgment that is incomprehensible, she elaborates in each disease an antitoxine that is exactly adapted to counteract that individual disease. She makes no mistake. She opposes one weapon to smallpox and another to scarlet fever, and each one is prepared skilfully for that especial emer-

gency. The body becomes a battlefield where these hostile forces wage destructive war, until one or the other prevail, and the patient dies or recovers.

There can be no reasonable doubt that it is upon the excessive production of antitoxine that future immunity depends, and since no infection protects the patient from any other disease than itself, a different antitoxine must be developed in each disease. Thus smallpox cannot protect a patient from yellow fever, nor diphtheria from measles.

Upon the result of this contest the patient himself can exert absolutely no direct influence. He is a non-combatant. He is not even an intelligent spectator. Forces which he cannot comprehend are striving desperately within him, and he is only conscious of discomfort from fever and weakness. In this battle the physician brings up his forces to the aid of his proper ally. In all ages he has fought with greater or less skill on the side of beneficent Nature. But often his aid has been that of a weak ally, perhaps too often that of one who meddles without intelligence in a combat that he does not comprehend. He is now beginning to comprehend it.

An illustration of the aid that the physician has learned to bring to the effective succor of his patient is the diphtheria antitoxine. In 1883, the Klebs-Loeffler bacillus was discovered, and in 1890 Behring and Kitasato announced their success in producing an antitoxine for diphtheria. Statistics vary widely on the mortality from this disease. Taking Hare's figures and averaging them, there is a mortality, between infancy and fourteen years, of 31.4° without the administration of antitoxine, and a mortality for the same period of life of 14.3° with the antitoxine. This

is probably too conservative, as some authors give mortalities respectively of 50° and of 3°. However, it is undoubtedly true, that more than one half of those who would formerly have died, now live. Indeed, they ought all to live.

Ehrlich's "Side-chain Hypothesis" is a very excellent and ingenious attempt to illustrate the manner in which the infection in the body is overcome by the development of a cellular antitoxine in diphtheria, but it is too technical to be intelligible to the general reader, and is at best a metaphor,—an attempt to state the problem of ultimate infection in pictorial terms.

Some diseases that were long considered contagious have proved on investigation not to be so. Yellow fever, which was always regarded as being frightfully contagious, is now known to be totally free from contagion. It is one of those diseases that brought the study of entomology within the circle of medicine. Malaria and ankylostomiasis (hookworm disease) helped to bring about this result. The plasmodium of malaria was discovered by Laveran in 1880, and the experiments of Major Ross showed that the disease is imparted through the bite of a mosquito—the anopheles. I do not know who gave it that name, which seems to come directly from ἀνωφελής, and means simply "useless." That seems but a slender name for an insect that has scourged the earth from the poles to the equator, and has for ages rendered the tropics a menace to human life. The anopheles has caused more deaths than all the wars that history records, and more suffering than the world has known from any other cause.

Yellow fever also comes to us through a mosquito—

the stegomyia. I do not know what the word means, but the insect has filled the world with terror. We know now that a mere gauze quarantine suffices to prevent yellow fever, and that knowledge was bought by an act of heroism, that throws a glory on humanity. The story has been told too often to need a detailed repetition here, and yet noble deeds belong to the whole human race and can suffer, not through repetition but through inefficiency in the narrator. Dr. Carlos Finlay of Havana was the first investigator who, in 1881, declared positively that the yellow fever was due to a mosquito. Finlay's experiments, however, were inconclusive, because they failed to recognize the development-cycle of the microorganism in the mosquito. Instead of allowing twelve days for its development, he made his tests after three to five days only. When in 1900 the United States army occupied Cuba, there were, within a few months, a thousand cases of yellow fever among them, with two hundred and thirty-one deaths. A commission was appointed by Dr. Sternberg, Surgeon-General of the Army, to investigate yellow fever. That commission was composed of Walter Reed, James Carroll, Jesse W. Lazear, and Aristides Agramonte, all of them surgeons in the army. After trying without success to develop cultures from yellow-fever patients, they turned their attention to Dr. Finlay's mosquito hypothesis. And now, at the threshold, an unexpected perplexity confronted them. It was well-known that no animal but man is susceptible to yellow fever. Upon whom then should the experiment be made?

Several years earlier, when Pasteur had proved that the "fixed" virus of rabies in rabbits (and the term "fixed virus" was used to indicate the highest degree

of malignancy or virulence) acted on dogs as a protection from rabies, the question arose as to whether it could be injected without danger into human beings uninfected with rabies. To prove that the virus that is swiftly fatal to rabbits is harmless to man, Proescher injected into himself the entire brain and medulla oblongata of a rabbit that had just died of rabies.¹ Proescher's confidence was justified. He experienced no ill-effects, and the manner in which he established its harmlessness sufficed to remove the fear that attended its former use. So now, when a somewhat similar necessity arose before the members of the commission, there was no hesitation. Carroll and Lazear offered themselves as subjects for the experiment. Agramonte had had yellow fever and was immune, and Reed was in Washington at the time, as I remember. Carroll and Lazear permitted themselves to be bitten by mosquitoes that were known to be infected. Carroll after a severe attack recovered, but Lazear died. The mosquito theory was demonstrated.

On the 21st, of May, 1879, in the waters of Iquique occurred the battle between the *Esmeralda*, a wooden corvette of eight hundred and fifty tons and carrying eight forty-pound guns, and the *Huascar*, an iron-clad battleship of one thousand tons and carrying two ten-inch Dahlgrens and others of smaller caliber. The *Esmeralda* belonged to Chile and the *Huascar* to Peru. After an artillery skirmish, the *Huascar* rammed the *Esmeralda*, and at the moment of impact Captain Prat of the Chilean vessel, calling to his men to follow, jumped to the deck of the Peruvian ship. Almost at once the vessels swung apart, leaving Captain Prat

¹ Rosenau.

alone, a single foe, on the deck of the battleship.¹ It may well be true that the Peruvians would willingly have preserved his life, and that he refused. At any rate, he was shot by the men in the turret and killed.

I have told this incident, though very briefly, because I wish to make a reflection. The death of Captain Prat was of greater value to Chile than if he had taken the *Huascar*, and had returned to Valparaiso uninjured. That he became the hero of the war is in itself a trifle; but his death revealed to every Chilean heart the amazing consciousness that he, too, if occasion required, was capable of equal heroism. So, in unconscious obedience to the same intuitive principle, the Decii devoted themselves to death in the forefront of battle. So the death of Lazear proved more than the origin of yellow fever,—it proved that his act proceeded out of a common heroism of self-sacrifice, which lies, generally unexercised, deep in the heart of humanity. Five years after the battle of Iquique, I spent some time as a guest at the hacienda of Don José J. Carbajal at Curimon, and saw much of his sister, Carmela Carbajal Prat, the widow of the hero of Iquique. She was still in mourning. Gentle, reserved, and kindly, she was the proudest woman in Chile, as if she also shared her husband's earthly immortality. How proud must be Mrs. Lazear, now that the bitterness of death has passed, to realize that the heart of the whole world reveres the memory of her heroic husband!

But the work of the Yellow Fever Commission was not complete. It remained to prove that the stegomyia mosquito was the only means of transmitting the

¹ One man only had time to follow his captain; his name was Aldea and his grade a sergeant. Like Prat he was shot down at once.

disease. Now that the question has been for many years decided, it is seen that there was no risk in the further experiments, but fourteen years ago, contact with the person infected or with any of his personal belongings, was believed to be as fatal as the bite of the infected mosquito had been proved to be. There was now no lack of volunteer subjects. The example of Carroll and Lazear was too recent for any one to shrink. The trouble now lay in selecting the individuals for the test. Finally, Doctor Cook of the Army and six privates of the Hospital Corps, were accepted for the experiment. They were shut up in a room, from which a number of persons who had lately died of yellow fever had been taken out for burial. For twenty consecutive nights they slept there, using the bedclothes, the wearing apparel, and the night garments, which were polluted with the excreta of those who had just died. To make the test effective, mosquitoes were of course excluded. When the twenty days were expired, they were taken out in perfect health. The demonstration was complete.

It is to be understood that these tests were not undertaken among such hazards of life for the mere satisfaction of a scientific curiosity, however laudable, to ascertain the origin of yellow fever, but through that knowledge to establish an adequate means of preventing it. The one was the natural outcome of the other; the means of protection lay in the discovery of origin. Since that day yellow fever is known to be as easily preventable as smallpox, and a disease that in one epidemic, that of 1878, swept away sixteen thousand lives and caused a loss of one hundred million dollars in the Mississippi Valley alone, can be entirely removed from the mortality tables in six months, if the work of

the Yellow Fever Commission of 1900 be properly supplemented and universally applied.

By this time the work begun by Pasteur had stretched out until it covered the whole world. The study of epidemics had itself become epidemic. From France it had extended to Britain, Germany, Italy, Russia, Japan, and America. Even from Peru comes an early incident of the general enthusiasm.

In Peru, the verruga had for centuries taken its silent toll of human life, and the people had quietly submitted without hope of relief. It was the first enemy the Spaniards met in their memorable march from Tumbez to Cajamalca in 1532, and they too learned to reconcile themselves to a fatality that they could not evade. In 1870, when the railroad from Lima to Oroya was begun, the verruga fell upon the workmen with increased virulence, and one in ten died yearly. The sudden onset conferred upon it a new name, Oroya fever, and in fact it was for a time considered a new disease, but the symptoms were those of verruga. In 1885, a young medical student in Lima, named Daniel Carrion,—long may his name be honored!—inoculated himself with the blood of a verruga patient, and after an incubation period of twenty-three days, developed the disease in its worst form. Day by day he noted his symptoms, and kept a clinical record of his own case until he died. For twenty-eight years the medical students of Lima have commemorated his sacrifice by laying flowers on his grave. Dr. Townsend, the director of one of the Entomological Stations in Peru, has recently discovered that the verruga also is transmitted to mankind by a mosquito, the so-called “ghost-gnat,” and thus one of the most obscure among the epidemic diseases is at length explained.

Our obvious and sensible duty is to make a grateful use of these achievements; to accept gratefully the triumphant benefits of vaccination and of the anti-toxines; to "resolve that these dead shall not have died in vain"; and to recognize the truth that the whole development of preventive medicine rests upon animal experimentation.

But a mere recognition does not suffice, nor does the thrill of gratitude exonerate us. These must be translated into terms of action. The result of a strictly enforced sanitation has had an object lesson in the record of the construction of the Panama Canal. It is too much, and at the same time too little, to say that there has been no case of yellow fever on the Isthmus since 1905.¹ Too much, because there have been four or five cases there during that period; too little, because the cases have been imported from without, and yet these new centers of infection, introduced into a healthy zone, have failed to infect a single person already on the Isthmus. The protection was so great that not only did no case develop during eight years, but they could even withstand the menace of cases introduced from abroad. They had protection to spare. Rabies, smallpox, and yellow fever are easily preventable diseases. There should never, for all time to come, be a death from any of them. With Von Behring's antitoxine, properly used, diphtheria is certain to disappear. Typhoid fever, which has destroyed so many valuable lives, is itself doomed to destruction.

The ravages of tuberculosis continue. Of the hundred million people dwelling to-day in the United States, ten million are doomed to die of tuberculosis.²

¹ *The Panama Gateway*, Bishop, 1913.

² Rosenau.

We have scratched the earth, but the plow must go deeper. Sanitariums for tuberculosis, dispensary treatment, sleeping in the open air, national associations for prevention, annual meetings of philanthropists, papers read and statistics compiled,—all these are of help and all are laudable. Nothing but praise can be uttered for each and for all of these things in their degree. But they do not suffice. Hitherto the search for a vaccine or an antitoxine has been fruitless. The reception of Dr. Friedmann's unhappy pretensions shows the general interest felt in the great question. It is probable that its solution does not lie in the line of the past experiments. It is possible that Koch's bacillus is not the last word in its production. It seems that there is something else, or the result so ardently desired would have been attained in thirty years. Is there an ultra-microscopical organism that has hitherto baffled detection? Is there a toxine that fails to appear in the test-tube?

Tuberculosis is a dainty disease. Other infections attack any one in reach, but tuberculosis takes only the cream. It selects the most attractive and the most intelligent of mankind, and its victims are the most valuable and productive lives. Between the ages of fifteen and fifty, it chooses carefully those whom it dooms to death, as if with a set purpose to cripple the human race and stifle progress. The Athenians sent an annual tribute of seven youths and seven maidens to Crete to be devoured by the Minotaur, but that tribute ceased in times that were still legendary! What a trifle is that to the one hundred and sixty thousand victims that this great scourge exacts from us in every year of the twentieth century?

What Dr. Gorgas accomplished at Panama and the

method of its accomplishment point out very plainly the results we may expect in the eradication of the infectious diseases as well as the way in which this must be accomplished. We all acknowledge the premises, but we balk at the conclusion. Courageous action must enforce honest reasoning. We cannot evade the obligations of reason. Fénelon, recognizing this truth, with sudden awe exclaimed "O Reason, what art thou but very God?" Nature has a way of compelling us, and the sooner we acknowledge the compulsion, the wiser we. The segregation of tuberculous patients must be effectively carried out. Not of some only,—not of the destitute alone, not of the advanced cases alone, but of all, alike, if we are to eradicate the "White Plague" as the "Black Plague" has been eradicated. We have waited a generation for a tuberculin that would work. While we have waited, five million tuberculous patients in the United States have been carried out for burial.

Such has been the history of the control that medicine has at last attained over the diseases that have, from times beyond historic record, devastated the earth. There has been in my mind no controversial purpose, no intention to enlarge upon these achievements; rather, in all cases that have been considered, I have stated none but well-known facts. For who could exaggerate the benefits to humanity that have flowed in an ever-increasing flood of health and life and happiness from these simple expedients of preventive medicine that I have imperfectly outlined? The Romans bestowed a crown upon every one who preserved the life of a Roman citizen. What other reward than our heartfelt gratitude and loving admiration can we

offer to these benefactors of humanity? The debt is beyond payment. Even to state it, to put it into words and figures, we must find some other vehicle than the language that voices our daily needs; some higher tongue, in which pæans originated, and in which the very heart of man must be coined into admiration and gratitude. On the far-lying outposts of humanity, on the distant frontier stations where quiet students are pushing onward the lines of civilization within the dread realm of infection and death, the number is unrecorded and the names unremembered of the many who have died that we might live.

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